

TABLE 3.1.1 PROTECTIVE INSTRUMENTATION REQUIREMENTS (Continued)

Function	Trip Setting	Reactor Modes in Which Function Must be Operable				Min. No. of Operable or Operating (Tripped) Trip Systems	Min. No. of Operable Instrument Channels per Operable Trip Systems	Action Required ^A
		Shutdown	Refuel	Startup	Run			
2. Low-Low/Low Reactor Water Level	≥ 4' 0" above top of active fuel	X(v)	X(v)	X(v)	X	2	2	See note h.
1. AC Voltage	NA			X(v)	X	2	2	Prevent auto depressurization on loss of AC power. See note
II. Isolation Condenser Isolation								
1. High Flow Steam Line	≤ 20 psig P	X(o)	X(o)	X	X	2	2	Isolate affected isolation condenser, comply with Spec. 3.8
2. High Flow Condensate line	≤ 27" P H ₂ O	X(o)	X(o)	X	X	2	2	See Note dd.
III. Offgas System Isolation								
1. High Radiation In Offgas Line (e)	≤ 10 x Stack Release limit (See 3.6-A.1)	X(o)	X(o)	X	X	1	2	Isolate reactor or trip the operable instrument channel
IV. Reactor Building Isolation and Standby Gas Treatment System Initiation								
1. High Radiation Reactor Building Operation Floor	≤ 100 Hr/Hr	X(u)	X(u)		X	1	1	Isolate Reactor Bldg. & Initiate Standby Gas Treatment System, or Manual Surveillance for not more than 24 hours
2. Reactor Bldg. Ventilation Exhaust	≤ 17 Hr/Hr	X(u)	X(u)	X	X	1	1	(total for all instruments under J) in any 30-day period
3. High Drywell Pressure	≤ 2.4 psig	X(u)	X(u)	X	X	1(k)	2(k)	
4. Low Low Reactor Water Level	≥ 7' 2" above top of active fuel	X(gg)	X	X	X	1	2	

TABLE 3.1.1 (CONT'D)

- v. These functions not required to be operable when the ADS is not required to be operable.
- w. These functions must be operable only when irradiated fuel is in the fuel pool or reactor vessel and secondary containment integrity is required per specification 3.5.B.
- y. The number of operable channels may be reduced to 2 per Specification 3.9-E and F.
- z. The bypass function to permit scram reset in the shutdown or refuel mode with control rod block must be operable in this mode.
- aa. Pump circuit breakers will be tripped in 10 seconds \pm 15% during a LOCA by relays SK7A and SK8A.
- bb. Pump circuit breakers will trip instantaneously during a LOCA.
- cc. Only applicable during startup mode while operating in IRM range 10.
- dd. If an isolation condenser inlet (steam side) isolation valve becomes or is made inoperable in the open position during the run mode comply with Specification 3.8.E. If an AC motor-operated outlet (condensate return) isolation valve becomes or is made inoperable in the open position during the run mode comply with Specification 3.8.F.
- ee. With the number of operable channels one less than the Min. No. of Operable Instrument Channels per Operable Trip Systems, operation may proceed until performance of the next required Channel Functional Test provided the inoperable channel is placed in the tripped condition within 1 hour.
- ff. This function is not required to be operable when the associated safety bus is not required to be energized or fully operable as per applicable sections of these technical specifications.
- gg. These functions are not required to be operable when secondary containment is not required to be maintained or when the conditions of section 3.5.B.1.a, b, c, and d are met. Reactor water level will be monitored during these periods.

TABLE J.1.1 PROTECTIVE INSTRUMENTATION REQUIREMENTS (CONTD)

Function	Trip Setting	Reactor Modes In Which Function Must Be Operable				Min. No. of Operable or Operating (Tripped) Trip Systems	Min. No. of Operable Instrument Channels Per Operable Trip Systems	Action Required ^A
		Shutdown	Refuel	Startup	Run			
B. Reactor Isolation								
1. Low-Low Reactor Water Level	AA	X (gg)	X	X	X	2	2	Close main steam isolation valves and close isolation condenser vent valves, or place in cold shutdown condition
2. High Flow in Main Steamline A	$\leq 120\%$ rated	X (s)	X (s)	X	X	2	2	
3. High Flow in Main Steamline B	$\leq 120\%$ rated	X (s)	X (s)	X	X	2	2	
4. High Temperature in Main Steamline Tunnel	\leq Ambient at Power + 50°F	X (s)	X (s)	X	X	2	2	
5. Low Pressure in Main Steamline	AA			X(cc)	X	2	2	
6. High Radiation in Main Steam Tunnel	$\leq 10\%$ Normal Background	X (s)	X (s)	X	X	2	2	
C. Isolation Condenser								
1. High Reactor Pressure	AA	X (s)	X (s)	X	X	2	2	Place plant in cold shutdown condition
2. Low-Low Reactor Water	$\geq 1'2''$ above top of	X (s)	X (s)	X	X	2	2	