

3. Pressurizer Safety Valves

- a. At least one pressurizer safety valve shall be operable whenever the reactor head is on the vessel.
- b. Both pressurizer safety valves shall be operable whenever the reactor is critical.

4. Pressurizer Power Operated Relief Valves (PORV) and PORV Block Valves

- a. Two PORVs and their associated block valves shall be operable.
  1. If a PORV is inoperable due to leakage in excess of that allowed in Specification 15.3.1.D, the PORV shall be restored to an operable condition within one hour or the associated block valve shall be closed.
  2. If a PORV is inoperable due to a channel functional test failure, the associated PORV control switch shall be placed in the closed position or the associated block valve shall be closed within one hour.
  3. If a PORV block valve is inoperable, the block valve shall be restored to an operable condition within one hour or the block valve shall be closed with power removed from the block valve, otherwise the unit shall be shut down and in hot shutdown within the next six hours.

5. The pressurizer shall be operable with at least 100 KW of pressurizer heaters available and a water level greater than 10% and less than 95% during steady-state power operation. At least one bank of pressurizer heaters shall be supplied by an emergency bus power supply.

Basis:

When the boron concentration of the reactor coolant system is to be reduced, the process must be uniform to prevent sudden reactivity changes in the reactor. Mixing of the reactor coolant will be sufficient to maintain a uniform boron concentration if at least one reactor coolant pump or one residual heat removal pump is running while the change is taking place. The residual heat removal pump will circulate the primary system volume in approximately one half hour. The pressurizer is of little concern

TABLE 15.3.5-5

## INSTRUMENT OPERATING CONDITIONS FOR INDICATIONS

NO.	FUNCTIONAL UNIT	1	2	3
		NO. OF CHANNELS	MINIMUM OPERABLE CHANNEL	OPERATOR ACTION IF CONDITIONS OF COLUMN 2 CANNOT BE MET
1.	PORV Position Indicator	1/Valve	1/Valve	If the operability of the PORV position indicator cannot be restored within 96 hours place the associated PORV control switch in the closed position or shut the associated PORV Block Valve.
2.	PORV Block Valve Position Indicator	1/Valve	1/Valve	If the operability of the POPV Block Valve Position Indicator cannot be restored within 96 hours, shut and verify the Block Valve shut by direct observation or declare the Block Valve inoperable.
3.	Safety Valve Position Indicator	1/Valve	1/Valve	If the operability of the Safety Valve Position Indicator cannot be restored within seven days, be in at least Hot Shutdown within the next 12 hours.
4.	Reactor Coolant System Subcooling	1	1	If the operability of a subcooling monitor cannot be restored or a backup monitor made functional within 48 hours, be in at least Hot Shutdown within the next 12 hours.
5.	Auxiliary Feedwater Flow Rate*	1	1	If the operability of the auxiliary feedwater flow rate indicator cannot be restored within 48 hours, be in hot shutdown within 12 hours.
6.	Control Rod Misalignment as Monitored by On-Line Computer	1	1	Log individual rod positions once/hr., after a load change or after >30 inches of control rod motion.

\*Applies to presently installed combination of auxiliary feedwater pump discharge flow indicators and auxiliary feedwater flow to steam generator indicators.

#### 15.5.4 FUEL STORAGE

##### Applicability

Applies to the capacity and storage arrays of new and spent fuel.

##### Objective

To define those aspects of fuel storage relating to prevention of criticality in fuel storage areas.

##### Specification

1. The new fuel storage and spent fuel pool structures are designed to withstand the anticipated earthquake loadings as Class I structures. The spent fuel pool has a stainless steel liner to ensure against loss of water.
2. The new and spent fuel storage racks are designed so that it is impossible to store assemblies in other than the prescribed storage locations. The fuel is stored vertically in an array with sufficient center-to-center distance between assemblies to assure  $K_{eff} < 0.95$  with the storage pool filled with unborated water and with the fuel loading in the assemblies limited to 44.8 grams of U-235 per axial centimeter of fuel assembly. An inspection area shall allow rotation of fuel assemblies for visual inspection, but shall not be used for storage.
3. The spent fuel storage pool shall be filled with borated water at a concentration of at least 1800 ppm boron whenever there are spent fuel assemblies in the storage pool.
4. Except for the two storage locations adjacent to the designated slot for the spent fuel storage rack neutron absorbing material surveillance specimen irradiation, spent fuel assembly storage locations immediately adjacent to the spent fuel pool perimeter or divider walls shall not be occupied by fuel assemblies which have been subcritical for less than one year.

##### References:

FSAR Section 9.3