3.1.8 Overpressure Protection Systems Specifications

a. When the temperature of one or more of the primary coolant system cold legs is $\leq$ 250°F, two power operated relief valves (PORVs) with a lift setting of $\leq$ 400 psia, or a reactor coolant system vent of $\geq$ 1.3 square inches shall be operable except as specified below:

(1) With one PORV inoperable, either restore the inoperable PORV to operable status within 7 days or depressurize and vent the PCS through a $\geq$ 1.3 square inch vent(s) within the next 8 hours; maintain the PCS in a vented condition until both PORVs have been restored to operable status.

(2) With both PORVs inoperable, depressurize and vent the PCS through a $\geq$ 1.3 square inch vent(s) within 8 hours; maintain the PCS in a vented condition until both PORVs have been restored to operable status.

b. In the event either the PORVs or the PCS vent(s) are used to mitigate a PCS pressure transient, a Special Report shall be prepared and submitted to the Commission within 30 days. The report shall describe the circumstances initiating the transient, the effect of the PORVs or vent(s) on the transient and any corrective action necessary to prevent recurrence.

Basis

The OPERABILITY of two PORVs or an PCS vent opening of greater than 1.3 square inches ensures that the PCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the PCS cold legs are $\leq$ 250°F. Either PORV has adequate relieving capability to protect the PCS from overpressurization when the transient is limited to either (1) the start of an idle PCP with the secondary water temperature of the steam generator $\leq$ 70°F above the PCS cold leg temperatures or (2) the start of a HPSI pump and its injection into a water solid PCS.[1]

References

(1) "Palisades Plant Overpressurization Analysis," June, 1977, and "Palisades Plant Primary Coolant System Overpressurization Subsystem Description," October, 1977.

(correction)

4.6 SAFETY INJECTION AND CONTAINMENT SPRAY SYSTEMS TESTS

Applicability

Applies to the safety injection system, the containment spray system, chemical injection system and the containment cooling system tests.

Objective

To verify that the subject systems will respond promptly and perform their intended functions, if required.

Specifications

4.6.1 Safety Injection System

a. System tests shall be performed at each reactor refueling interval. A test safety injection signal will be applied to initiate operation of the system. The safety injection and shutdown cooling system pump motors may be de-energized for this test.

b. The system test will be considered satisfactory if control board indication and visual observations indicate that all components have received the safety injection signal in the proper sequence and timing (ie, the appropriate pump breakers shall have opened and closed, and all valves shall have completed their travel).

c. All high pressure safety injection pumps except those otherwise required to be operable shall be demonstrated inoperable at least once per 12 hours whenever the temperature of one or more of the PCS cold legs is $\leq$250°F and the vessel head is not removed by verifying that the control system fuses and their fuse holders for the HPSI pumps (P66A, P66B and P66C) have been removed from the circuit.

4.6.2 Containment Spray System

a. System tests shall be performed at each reactor refueling interval. The test shall be performed with the isolation valves in the spray supply lines at the containment blocked closed. Operation of the system is initiated by tripping the normal actuation instrumentation.

b. At least every five years the spray nozzles shall be verified to be open.

c. The test will be considered satisfactory if visual observations indicate all components have operated satisfactorily.

4.6.3 Pumps

a. The safety injection pumps, shutdown cooling pumps, and containment spray pumps shall be started at intervals not to exceed three months. Alternate manual starting between control room console and the C-33 panel shall be practiced in the test program.