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REACTOR COOLANT SYSTEM

PILOT OPERATED RELIEF VALVE AND BLOCK VALVE

LIMITING CONDITION FOR OPERATION

3.4.12 The Pilot Operated Relief Valve (PORV) and its associated block valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

- ACTION:
- a. With the PORV inoperable because of seat leakage, within 4 hours restore the PORV to OPERABLE status or close the PORV block valve with power maintained to the block valve; otherwise be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
  - b. With the PORV inoperable due to causes other than seat leakage:
    1. Within 1 hour either restore the PORV to OPERABLE status or close the PORV block valve.
    2. If the PORV block valve is closed to comply with ACTION b.1, restore the PORV to OPERABLE status within the following 7 days and reopen the block valve, or be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
  - c. With the block valve inoperable, within 7 days restore the block valve to OPERABLE status; otherwise, be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
  - d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

- 4.4.12.1 In addition to the requirements of Specification 4.0.5, the PORV shall be demonstrated OPERABLE at least once per 18 months by operating the PORV through one complete cycle of full travel during MODES 3 or 4.
- 4.4.12.2 The PORV Block Valve shall be demonstrated OPERABLE at least once per 92 days by operating the valve through one complete cycle of full travel unless the block valve is closed in order to meet the requirements of Specification 3.4.12 ACTION a. or b.

REACTOR COOLANT SYSTEM

BASES

3/4.4.10 STRUCTURAL INTEGRITY

The inspection programs for ASME Code Class 1, 2 and 3 components, except steam generator tubes, ensure that the structural integrity of these components will be maintained at an acceptable level throughout the life of the plant. To the extent applicable, the inspection program for these components is in compliance with Section XI of the ASME Boiler and Pressure Vessel Code.

The internals vent valves are provided to relieve the pressure generated by steaming in the core following a LOCA so that the core remains sufficiently covered. Inspection and manual actuation of the internals vent valves 1) ensure OPERABILITY, 2) ensure that the valves are not stuck open during normal operation, and 3) demonstrates that the valves are fully open at the forces equivalent to the differential pressures assumed in the safety analysis.

3/4.4.11 HIGH POINT VENTS

The Reactor Coolant System high point vents are installed per NUREG-0737 item II.B.1 requirements. The operability of the system ensures capability of venting steam or noncondensable gas bubbles in the reactor cooling system to restore natural circulation following a small break loss of coolant accident.

3/4.4.12 PILOT OPERATED RELIEF VALVE AND BLOCK VALVE

The OPERABILITY of the PORV flow path ensures that challenges to the pressurizer code safety valves will be minimized by providing an alternate means of limiting RCS pressure excursions.

PORV seat leakage less than the limits of Technical Specification 3/4.4.6.2 Operational Leakage, do not require entry into Technical Specification 3/4.4.12, Pilot Operated Relief Valve and Block Valve.

In the event of an inoperable PORV, the OPERABILITY of the PORV Block Valve provides a means of isolating the PORV flow path thus assuring RCS integrity through this relief path.

If the PORV Block Valve is closed due to seat leakage, the PORV Block valve should remain energized to assure the PORV flow path remains available if needed for the beyond - design basis feed and bleed cooling mode of operation. Feed and bleed cooling is not part of the licensing basis for the plant.