

3.5 LIMITING CONDITION FOR OPERATION

5. All recirculation pump discharge valves and bypass valves shall be operable or closed prior to reactor startup.
  6. If the requirements of Specifications 3.5.A cannot be met, an orderly shutdown of the reactor shall be initiated and the reactor shall be in a cold shutdown condition within 24 hours.
- B. Containment Spray Cooling Capability
1. Both containment cooling spray loops are required to be operable when the reactor water temperature is greater than 212°F except that a Containment Cooling Subsystem may be inoperable for thirty days.
  2. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the cold shutdown condition within 24 hours.

4.5 SURVEILLANCE REQUIREMENT

5. Operability testing of recirculation pump discharge valves and bypass valves shall be in accordance with Specification 4.6.E.
- B. Containment Spray Cooling Capability
1. Surveillance of the drywell spray loops shall be performed as follows. An air test shall be performed on the drywell spray headers and nozzles following maintenance that could result in nozzle blockage.
  2. Deleted.

BASES:4.5 CORE AND CONTAINMENT COOLANT SYSTEMSA. Core Spray and LPCI

During normal plant operation, manual tests of operable pumps and valves shall be conducted in accordance with Specification 4.6.E to demonstrate operability.

During each refueling shutdown, tests (as summarized below) shall be conducted to demonstrate proper automatic operation and system performance.

Periodic testing as described in Specification 4.6.E will demonstrate that all components which do not operate during normal conditions will operate properly if required.

The automatic actuation test will be performed by simulation of high drywell pressure or low-low water level. The starting of the pump and actuation of valves will be checked. The normal power supply will be used during the test. Testing of the sequencing of the pumps when the diesel generator is the source of power will be checked during the testing of the diesel. Following the automatic actuation test, the flow rate will be checked by recirculation to the suppression chamber. The pump and valve operability checks will be performed by manually starting the pump or activating the valve. For the pumps, the pump motors will be run long enough for them to reach operating temperatures.

B. and C. Containment Spray Cooling Capability and RHR Service Water Systems

The periodic testing requirements specified in Specifications 4.5.B and C will demonstrate that all components will operate properly if required. Since this is a manually actuated system, no automatic actuation test is required. The system will be activated manually and the flow checked by an indicator in the control room.

Surveillance 4.5.B.1 is performed following maintenance that could result in nozzle blockage, to verify that the spray nozzles are free of obstructions by blowing air through them and demonstrating an open flow path. The frequency for performance of this surveillance test is adequate due to the passive nozzle design, its normally dry state and has been shown to be acceptable through operating experience.

BASES: 4.5 (Cont'd)D., E., and F. Station Service Water and Alternate Cooling Tower Systems and High Pressure Coolant Injection and Automatic Depressurization System

HPCI system testing demonstrates operational readiness of equipment and detects degradations which may affect reliable operation. Testing is conducted during each reactor startup if maintenance that affects operability was performed on the HPCI system. Periodic testing is also performed in accordance with Specification 4.6.E and the inservice testing program.

Sufficient steam flow must be available prior to HPCI testing to avoid inducing an operational transient when steam is diverted to the HPCI system. Reactor startup is allowed prior to performing the required surveillance testing in order to achieve adequate steam pressure and flow. However, a 24-hour limitation is imposed for performing operability testing once reactor steam pressure exceeds 150 psig. The short duration before full functional testing is performed is considered acceptable.

The Automatic Depressurization System is tested during refueling outages to avoid an undesirable blowdown of the Reactor Coolant System.

The HPCI Automatic Actuation Test will be performed by simulation of the accident signal. The test is normally performed in conjunction with the automatic actuation of all Core Standby Cooling Systems.

G. Reactor Core Isolation Cooling System

The frequency and conditions for testing of the RCIC system are the same as for the HPCI system. Testing is conducted in accordance with Specification 4.6.E and provides assurance that the system will function as intended.

H. Minimum Core and Containment Cooling System Availability

Deleted.

I. Maintenance of Filled Discharge Pipe

Observation of water flowing from the discharge line high point vent as required by Specification 4.5.I assures that the Core Cooling Subsystems will not experience water hammer damage when any of the pumps are started. Core Spray Subsystems and LPCI Subsystems will also be vented through the discharge line high point vent following a return from an inoperable status to assure that the system is "solid" and ready for operation.