

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent containment spray systems shall be OPERABLE with each spray system capable of taking suction from the RWST and transferring suction to the RHR pump discharge.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one containment spray system inoperable, restore the inoperable spray system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the inoperable spray system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.1 Each containment spray system shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. By verifying, that on recirculation flow, each pump develops a differential pressure of greater than or equal to 204 psid when tested pursuant to the INSERVICE TESTING PROGRAM.
- c. In accordance with the Surveillance Frequency Control Program during shutdown, by:
 1. Verifying that each automatic valve in the flow path actuates to its correct position on a Containment High-High pressure test signal.
 2. Verifying each spray pump starts automatically on a Containment High-High pressure test signal.
- d. Following activities that could result in nozzle blockage, either evaluate the work performed to determine the impact to the containment spray system, or perform an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

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SPRAY ADDITIVE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.2 The spray additive system shall be OPERABLE with:

- a. A spray additive tank containing a volume of between 2568 and 4000 gallons of between 30 and 32 percent by weight NaOH solution, and
- b. Two spray additive eductors each capable of adding NaOH solution from the chemical additive tank to a containment spray system pump flow.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the spray additive system inoperable, restore the system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the spray additive system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.2 The spray additive system shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. In accordance with the Surveillance Frequency Control Program by:
 1. Verifying the solution level in the tank, and
 2. Verifying the concentration of the NaOH solution by chemical analysis.
- c. In accordance with the Surveillance Frequency Control Program during shutdown, by verifying that each automatic valve in the flow path actuates to its correct position on a Containment High-High pressure test signal.
- d. In accordance with the Surveillance Frequency Control Program by:
 1. Verifying a NaOH solution flow rate of 12.0 ± 3.0 gpm from the spray additive tank through sample valve 2CS61 with the spray additive tank at 2.5 ± 0.5 psig and

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SPRAY ADDITIVE SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the spray additive tank eductor flow will be 35 ± 3.5 gpm to each containment spray system. Testing may be performed by measuring the flow of borated water from the RWST through the installed 2" test line and Valve CS31; using this test line up with the spray pump operating in the recirculation mode and the RWST level at $41 \text{ feet} \pm 0.5 \text{ feet}$, the measured flow shall be $57 \text{ gpm} \pm 5.7 \text{ gpm}$.

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CONTAINMENT COOLING SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.3 Five containment cooling fans shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one or two of the above required containment cooling fans inoperable, restore the inoperable cooling fan(s) to OPERABLE status within 14 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- b. With three or more of the above required containment cooling fans inoperable, restore at least three cooling fans to OPERABLE status within 1 hour or be in at least HOT STANDBY WITHIN the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore the remaining inoperable cooling fans to OPERABLE status within 14 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.3 Each containment cooling fan shall be demonstrated OPERABLE:

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SURVEILLANCE REQUIREMENTS (Continued)

- a. In accordance with the Surveillance Frequency Control Program by:
 - 1. Verifying the water level in each service water accumulator vessel is greater than or equal to 226 inches and less than or equal to 252 inches.
 - 2. Verifying the temperature in each service water accumulator vessel is greater than or equal to 55°F and less than or equal to 95°F.
 - 3. Verifying the nitrogen cover pressure in each service water accumulator vessel is greater than or equal to 135 psig and less than or equal to 160 psig.

- b. In accordance with the Surveillance Frequency Control Program by:
 - 1. Deleted
 - 2. Verifying that each fan operates for at least 15 minutes.
 - 3. Verifying a cooling water flow rate of greater than or equal to 1300 gpm to each cooler.

- c. In accordance with the Surveillance Frequency Control Program by verifying that on an actual or simulated actuation signal:
 - 1. Each fan starts automatically.
 - 2. The automatic valves and dampers actuate to their correct positions and that the cooling water flow rate to each cooler is greater than or equal to 1300 gpm.

- d. In accordance with the Surveillance Frequency Control Program by verifying that on a loss of offsite power test signal, each service water accumulator vessel discharge valve response time is within limits.