

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying the correct position of each mechanical position stop for each of the stop check valves listed in Specification 4.5.2.c.
3. Verifying that the flow switches for the throttle valves listed in Specification 4.5.2.d operate properly.
4. A visual inspection of the containment emergency sump which verifies that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.
5. Verifying a total leak rate less than or equal to 6 gallons per hour for the LPI system at:
 - a) Normal operating pressure or a hydrostatic test pressure of greater than or equal to 150 psig for those parts of the system downstream of the pump suction isolation valve, and
 - b) Greater than or equal to 55 psig for the piping from the containment emergency sump isolation valve to the pump suction isolation valve.
- f. At least once per 18 months by
 1. Verifying that each automatic valve in the flow path actuates to its correct position on a high pressure or low pressure safety injection test signal, as appropriate.
 2. Verifying that each HPI and LPI pump test starts automatically upon receipt of a high pressure or low pressure safety injection test signal, as appropriate.
- g. Following completion of HPI or LPI system modifications that could have altered system flow characteristics¹, by performance of a flow balance test during shutdown to confirm the following injection flow rates into the Reactor Coolant System:

HPI System - Single Pump²

Single pump flow rate greater than or equal to 500 gpm at 600 psig.

While injecting through 4 Injection Legs, the flow rate for all combinations of 3 Injection Legs greater than or equal to 350 gpm at 600 psig.

LPI System - Single Pump

1. Injection Leg A - 2800 to 3100 gpm.

2. Injection Leg B - 2800 to 3100 gpm.

¹Flow balance tests performed prior to complete installation of modifications are valid if performed with the system change that could alter flow characteristics in effect.

²The HPI Flow Balance Test shall be performed prior to entering Mode 2.

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ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4. At least once per 18 months, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 1 hour when the battery is subjected to a battery service test.
5. At least once per 60 months, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
 1. Verifying the fuel level in the day fuel tank,
 2. Verifying the fuel level in the fuel storage tank,
 3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank,
 4. Verifying the diesel starts from ambient condition and accelerates to at least 900 rpm in less than or equal to 10 seconds,
 5. Verifying the generator is synchronized, loaded to greater than or equal to 1500 kw, and operates for greater than or equal to 60 minutes, and
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
- b. At least once each 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-68 when checked for viscosity, water and sediment.
- c. At least once per refueling cycle, during shutdown by:
 1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service,

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SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying the generator capability to reject a load of ≥ 515 kw without tripping.
3. Simulating a loss of offsite power in conjunction with Reactor Building high pressure and Reactor Building high-high pressure tests signals, and;¹
 - a) Verifying de-energization of the emergency buses and load shedding from the emergency busses,
 - b) Verifying that the 4160 v. emergency bus tie breakers open,
 - c) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency busses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer, and operates for ≥ 5 minutes while its generator is loaded with the emergency loads.
4. Verifying the diesel generator operates for ≥ 60 minutes while loaded to ≥ 3000 kw,
5. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 3000 kw, and
6. Verifying that the automatic load sequence timers are OPERABLE with each load sequence time interval within $\pm 10\%$.

¹This test shall be performed prior to entering Mode 2.