

MAIN COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

- c. Inspections Following System Opening The structural integrity of the Main Coolant System shall be demonstrated after each closing by performing a leak test, with the system pressurized to at least 2200 psig, in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1970 Edition, and Addenda through Winter 1970, and the Pressure/Temperature limits of Specification 3.4.8.1.

4.4.9.2* The following inspection program shall be performed at least once per 18 months during shutdown on at least one shroud tube per quadrant.

- a. Inspect the integrity of the bolts and locking devices in the lower flange at the bottom of the shroud tubes.
- b. Inspect the interface between the shroud tube lower flange and the tie plate for separation.
- c. Inspect the interface between the shroud tube upper flange and the top shroud tube support plate for separation.
- d. Inspect the interface between the top shroud tube support plate and the lower core support plate for separation.
- e. Inspect for abnormalities one of each of the types of bolts per quadrant.

4.4.9.3* The pressurizer interior shall be inspected at least once per 18 months during shutdown using the best available techniques to determine if any change has occurred in the cladding cracks that exist and whether any further cracking of the cladding has taken place.

4.4.9.4 The 2" charging line between CH-MOV-524 and CH-611A shall be dye penetrant tested at least once per 18 months during shutdown.

*The intent of the 18 month surveillance requirements for Sections 4.4.9.2 and 4.4.9.3 is that these surveillances would be performed on a refueling basis. For this reason, as well as ALARA considerations, the surveillance requirements of sections 4.4.9.2 and 4.4.9.3 are exempt during the 1980 Turbine Failure outage.

MAIN COOLANT SYSTEM

STEAM GENERATORS

LIMITING CONDITION FOR OPERATION

3.4.10 Each steam generator in a non-isolated main coolant loop shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more steam generators in non-isolated main coolant loops inoperable, restore the inoperable generator(s) to OPERABLE status prior to increasing T_{avg} about 200°F.

SURVEILLANCE REQUIREMENTS

4.4.10.1* Steam Generator Sample Selection and Inspection - Each steam generator shall be determined OPERABLE during shutdown by selecting and inspecting at least the minimum number of steam generators specified in Table 4.4-4.

4.4.10.2 Steam Generator Sample Selection and Inspection - The steam generator tube minimum sample size, inspection result classification and the corresponding action required shall be as specified in Table 4.4-5. The inservice inspection of steam generator tubes shall be performed at the frequencies specified in Specification 4.4.10.3 and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 4.4.10.4. The tubes selected for each inservice inspection shall include at least 3% of the total number of tubes in all steam generators; the tubes selected for these inspections shall be selected on a random basis except:

- a. Where experience in similar plants with similar water chemistry indicates critical areas to be inspected, then at least 50% of the tubes inspected shall be from these critical areas.
- b. The first sample of tubes selected for each inservice inspection of each steam generator shall include:
 1. All nonplugged tubes that previously had detectable wall penetrations (20%).
 2. Tubes in those areas where experience has indicated potential problems.

*The intent of the 18 month surveillance requirement for Section 4.4.10.1 is that this surveillance would be performed on a refueling basis. For this reason, as well as ALARA considerations, the surveillance requirement of sections 4.4.10.1 is exempt during the 1980 Turbine Failure outage.

MAIN COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

4.4.10.3* Inspection Frequencies - The above required inservice inspections of steam generator tubes shall be performed at the following frequencies:

- a. Inservice inspections shall be performed at intervals of not less than 12 nor more than 24 calendar months after the previous inspection. If two consecutive inspections result in all inspection results falling into the C-1 category or if two consecutive inspections demonstrate that previously observed degraded has not continued and no additional degradation has occurred, the inspection interval may be extended to a maximum of once per 40 months.
- b. If the results of the inservice inspection of a steam generator conducted in accordance with Table 4.4-5 at 10 month intervals fall in Category C-3, the inspection frequency shall be increased to at least once per 20 months. The increase in inspection frequency shall apply until the subsequent inspections satisfy the criteria of Specification 4.4.10.3.a; the interval may then be extended to a maximum of once per 40 months.
- c. Additional, unscheduled inservice inspections shall be performed on each steam generator in accordance with the first sample inspection specified in Table 4.4-5 during the shutdown subsequent to any of the following conditions:
 1. Primary-to-secondary tubes leaks (not including leaks originating from tube-to-tube sheet welds) in excess of the limits of Specification 3.4.5.2.
 2. A loss-of-coolant accident requiring actuation of the engineered safeguards.
 3. A main steam line or feedwater line break.

*The intent of the surveillance requirement for Section 4.4.10.3 is that this surveillance would be performed on a refueling basis. For this reason, as well as ALARA considerations, the surveillance requirement of sections 4.4.10.3 is exempt during the 1980 Turbine Failure outage.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 4.* Verifying that two low pressure safety injection pumps develop a combined flow 2180 gpm. Test every LPSI pump at least once per 36 months.
5. Verifying that each charging pump stops automatically upon receipt of a safety injection signal.
6. Verifying that the charging header flow metering instrument is OPERABLE by performing a CHANNEL CALIBRATION.
7. Verifying that each valve listed in Specification 4.5.2.b.3 is in its normally open position.
8. Verifying the proper positioning of the HPSI throttle valves SI-V-671, 672, 673, and 674 by performing an inspection to insure that:
 - a) Each valve locking device is in place and securely welded to the valve handle and to the valve yoke.
 - b) The scribe mark on each valve body aligns with the scribe mark on the valve yoke.
9. Verifying the proper positioning of hot leg injection throttle valve SI-V-645 at least once per 36 months by flow testing.
- f. At least every 36 months, and/or any time either test under 4.5.e.8 is failed, by developing a backpressure of 875 psig in the high pressure safety injection header with two HPSI pumps operating as follows:
 1. Pressure to the suction of the HPSI pumps to be 170_± 10 psi.
 2. LPSI flow is isolated.
 3. Injection flow is to one loop with the other loops isolated by closing the appropriate injection gate valves CS-MOV-536, CS-MOV-537, CS-MOV-538, and CS-MOV-539
 4. The flow to the injection loops shall not be less than 200 gpm.
 5. The above test shall be repeated to include the operation of all HPSI pumps.

*The intent of the surveillance requirement for Section 4.5.2.c.4 is that this surveillance would be performed on a refueling basis. For this reason, as well as ALARA considerations, the surveillance requirement of section 4.5.2.e.4 is exempt during the 1980 Turbine Failure outage.