

MARKED-UP TECHNICAL SPECIFICATION BASES PAGES

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3/4.6.2.3 CONTAINMENT COOLING SYSTEM (Continued)

exceeded. Since a single failure cannot be tolerated, the footnote limits the acceptability of low CCW flow to the CFCU cooling coils to Mode 4 with the RHR system in service and ASME Section XI testing in Modes 1 through 4.

In order to support the analysis that permits operation with low CCW flow to the CFCUs, both containment spray trains must be OPERABLE and at least three CFCU must be verified OPERABLE prior to opening an RHR heat exchanger outlet valve for Section XI testing.

Surveillance Requirement 4.6.2.3a.3)

TS 4.6.2.3a.3) requires that each CFCU be started in low speed every 31 days. The purpose of this requirement is to assure that the CFCU and the associated control equipment is capable of operating in the configuration required for the DBA. The surveillance frequency of 31 days is based on the known reliability of the fan units and controls, redundancy available, and the low probability of significant degradation of the CFCUs occurring between surveillances.

Surveillance Requirement 4.6.2.3b.

TS 4.6.2.3b. requires that each CFCU be started on a safety injection signal once ~~every 18 months~~. This surveillance provides assurance that the circuitry required to start the CFCU during a DBA is OPERABLE. The ~~18 month~~ frequency is based on the need to perform these surveillances under the conditions that apply during a plant outage and the potential for an unplanned transient if the surveillances were performed with the reactor at power. Operating experience has shown that these components usually pass the surveillances when performed at the ~~18 month~~ frequency. Therefore, the frequency was concluded to be acceptable from a reliability standpoint.

REFERENCES

1. 10 CFR 50, Appendix A, GDC 38, GDC 40, GDC 41, GDC 42, and GDC 43.
2. 10 CFR 50, Appendix K.
3. FSAR Section 6.2B.3.
4. FSAR Section 6.2.1.3.6.
5. FSAR Table 6.2-5.
6. FSAR Section 6.2.2.2.2.2.
7. FSAR Section 9.2.2
8. FSAR Section 15.4.

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3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM (continued)

of overall performance. Such inservice tests confirm component OPERABILITY, trend performance, and detect incipient failures by indicating abnormal performance. Performance of inservice testing discussed in the ASME Code, Section XI (Ref. 2) (only required at 3 month intervals) satisfies this requirement. The 31 day Frequency on a STAGGERED TEST BASIS results in testing each pump once every 3 months, as required by Reference 2.

This SR is modified by a Note indicating that the SR for the turbine driven pump should be deferred until suitable test conditions are established. This deferral is required because there is insufficient steam pressure to perform the test.

Surveillance Requirement 4.7.1.2.1c

This SR verifies that AFW can be delivered to the appropriate steam generator in the event of any accident or transient that generates an ESFAS, by demonstrating that each automatic valve in the flow path actuates to its correct position on an actual or simulated actuation signal. This Surveillance is not required for valves that are locked, sealed, or otherwise secured in the required position under administrative controls. The ~~18 month~~ Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. The ~~18 month~~ Frequency is acceptable based on operating experience and the design reliability of the equipment.

This SR verifies that the AFW pumps will start in the event of any accident or transient that generates an ESFAS by demonstrating that each AFW pump starts automatically on an actual or simulated actuation signal. The ~~18 month~~ Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power.

This SR is modified by a Note indicating that the SR for the turbine driven pump should be deferred until suitable test conditions are established. This deferral is required because there is insufficient steam pressure to perform the test.

REFERENCES

1. FSAR, Section 6.5 and Section 15.2.8
2. ASME, Boiler and Pressure Vessel Code, Section XI
3. Surveillance Test Procedures (STPs) P-AFW-11, P-AFW-12, P-AFW-13, P-AFW-21, P-AFW-22, P-AFW-23

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3/4.6.2.3 CONTAINMENT COOLING SYSTEM (Continued)

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Surveillance Requirement 4.6.2.3a.3)

TS 4.6.2.3a.3) requires that each CFCU be started in low speed every 31 days. The purpose of this requirement is to assure that the CFCU and the associated control equipment is capable of operating in the configuration required for the DBA. The surveillance frequency of 31 days is based on the known reliability of the fan units and controls, redundancy available, and the low probability of significant degradation of the CFCUs occurring between surveillances.

Surveillance Requirement 4.6.2.3b.

TS 4.6.2.3b. requires that each CFCU be started on a safety injection signal once per REFUELING INTERVAL. This surveillance provides assurance that the circuitry required to start the CFCU during a DBA is OPERABLE. The REFUELING INTERVAL frequency is based on the need to perform these surveillances under the conditions that apply during a plant outage and the potential for an unplanned transient if the surveillances were performed with the reactor at power. Operating experience has shown that these components usually pass the surveillances when performed at the REFUELING INTERVAL frequency. Therefore, the frequency was concluded to be acceptable from a reliability standpoint.

REFERENCES

1. 10 CFR 50, Appendix A, GDC 38, GDC 40, GDC 41, GDC 42, and GDC 43.
2. 10 CFR 50, Appendix K.
3. FSAR Section 6.2B.3.
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3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM (continued)

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Surveillance Requirement 4.7.1.2.1c.

This SR verifies that AFW can be delivered to the appropriate steam generator in the event of any accident or transient that generates an ESFAS, by demonstrating that each automatic valve in the flow path actuates to its correct position on an actual or simulated actuation signal. This Surveillance is not required for valves that are locked, sealed, or otherwise secured in the required position under administrative controls. The REFUELING INTERVAL Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. The REFUELING INTERVAL Frequency is acceptable based on operating experience and the design reliability of the equipment.

This SR verifies that the AFW pumps will start in the event of any accident or transient that generates an ESFAS by demonstrating that each AFW pump starts automatically on an actual or simulated actuation signal. The REFUELING INTERVAL Frequency is based on the need to perform this Surveillance under the conditions that apply during a unit outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power.

This SR is modified by a Note indicating that the SR for the turbine driven pump should be deferred until suitable test conditions are established. This deferral is required because there is insufficient steam pressure to perform the test.

REFERENCES

1. FSAR, Section 6.5 and Section 15.2.8
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