

SURVEILLANCE REQUIREMENTS (Continued)

type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.7.10.f. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

d. Transient Event Inspection

An inspection shall be performed of all snubbers attached to sections of systems that have experienced unexpected, potentially damaging transients as determined from a review of operational data and a visual inspection of the systems within 6 months following such an event. In addition to satisfying the visual inspection acceptance criteria, freedom-of-motion of mechanical snubbers shall be verified using at least one of the following: (1) manually induced snubber movement; or (2) evaluation of in-place snubber piston setting; or (3) stroking the mechanical snubber through its full range of travel.

e. Functional Tests

During the first refueling shutdown and at least once each REFUELING INTERVAL thereafter, a representative sample of snubbers of each type shall be tested using one of the following sample plans. The sample plan for each type shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan selected for each snubber type prior to the test period or the sample plan used in the prior test period shall be implemented:

- 1) At least 10% of the total of each type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.7.10f., an additional 5% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

* EXCEPT THE SURVEILLANCE RELATED TO SNUBBER FUNCTIONAL TESTING DUE NO LATER THAN MARCH 10, 1999 MAY BE DEFERRED UNTIL THE END OF THE NEXT REFUELING OUTAGE OR NO LATER THAN SEPTEMBER 10, 1999 WHICHEVER IS EARLIER.

Attachment 2

Millstone Nuclear Power Station, Unit No. 3
Proposed Revision to Technical Specification
Snubber Functional Test Inspection Interval (TSCR 3-25-93)

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RETYPE OF PROPOSED REVISION

Refer to the attached retype of the proposed revision to the Technical Specifications. The attached retype reflects the currently issued version of the Technical Specifications. Pending Technical Specification revisions or Technical Specification revisions issued subsequent to this submittal are not reflected in the enclosed retype. The enclosed retype should be checked for continuity with Technical Specifications prior to issuance.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.7.10.f. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

d. Transient Event Inspection

An inspection shall be performed of all snubbers attached to sections of systems that have experienced unexpected, potentially damaging transients as determined from a review of operational data and a visual inspection of the systems within 6 months following such an event. In addition to satisfying the visual inspection acceptance criteria, freedom-of-motion of mechanical snubbers shall be verified using at least one of the following: (1) manually induced snubber movement; or (2) evaluation of in-place snubber piston setting; or (3) stroking the mechanical snubber through its full range of travel.

e. Functional Tests

During the first refueling shutdown and at least once each REFUELING INTERVAL thereafter,* a representative sample of snubbers of each type shall be tested using one of the following sample plans. The sample plan for each type shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan selected for each snubber type prior to the test period or the sample plan used in the prior test period shall be implemented:

- 1) At least 10% of the total of each type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.7.10f., an additional 5% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

*Except the surveillance related to snubber functional testing due no later than March 10, 1999 may be deferred until the end of the next refueling outage or no later than September 10, 1999, whichever is earlier.

Docket No. 50-423
B17342

Attachment 3

Millstone Nuclear Power Station, Unit No. 3
Proposed Revision to Technical Specification
Snubber Functional Test Inspection Interval (TSCR 3-25-98)

Background and Safety Summary

December 1998

Background

Technical Specification Surveillance 4.7.10.e requires the functional testing of a representative sample of snubbers at least once each refueling interval. During the recent extended shutdown, snubber inspections occurred over the interval of the shutdown with the first inspection being performed on September 10, 1996, and the last inspection was performed on September 23, 1997. Given the nominal 24-month surveillance interval, and considering the 25 percent extension allowed by Technical Specification 4.0.2, and conservatively considering the beginning of the recently completed inspections as the start of the interval, results in a date of March 10, 1999, by which the next snubber inspection interval would be required. The next refueling outage, RFO6, is presently scheduled for May 1999 and an additional plant shutdown would be required to complete the inspections, since many of the snubbers are not accessible during plant operation. The proposed revision would allow the next snubber surveillance interval to be deferred until the end of RFO6 or September 10, 1999, whichever date is earlier. This proposed revision to Technical Specification Surveillance 4.7.10.e was evaluated to be safe and to not involve a 10CFR50.59 Unreviewed Safety Question.

SAFETY SUMMARY

Technical Specification Surveillance 4.7.10.e requires that a representative sample of each snubber type be functionally tested on a refueling interval via a defined test plan. Technical Specification amendment 127 established the refueling interval as a nominal 24-month time frame. As a result of the extended mid-cycle plant shutdown experienced by Millstone Unit No. 3 the actual calendar time for the interval inspections occurring at the presently scheduled RFO6 would be up to 36 months, although the actual plant operation time will be approximately one year.

Millstone Unit No. 3 uses two sample plans to test the four type of snubbers currently installed in the plant. Type A (small mechanical), Type C (large mechanical), Type D (large hydraulic) snubbers are tested to the "10 percent plan", while Type B (medium mechanical) snubbers are tested to the "37 plan". The 10 percent plan requires an initial test sample size of 10 percent of that type of snubber. Under the 37 plan, an initial test sample size of 37 snubbers are tested. Each plan requires an additional sample equal to approximately one half the initial sample size to be tested for each identified failure. Testing normally continues until no more failures are found or until all of the snubbers of that type are tested. Both of these test plans are self correcting in nature, each requiring

additional testing when functional failures are identified. The nature of this test plan is independent of the test interval initiating the inspections and accordingly is not impacted by the extended interval.

Snubber testing experience at Millstone Unit No. 3 has shown that historical failure rates of snubbers are low. During the third refueling outage, after an operating cycle of approximately 22 months, the functional testing program identified multiple Type A failures attributed primarily to original plant construction, and resulted in a full inspection of all Type A snubbers. The snubber inspection interval was extended to approximately 30 months by a one-time extension to the Technical Specifications for the fourth refueling outage and only one Type A snubber failure was identified. Subsequent outages with operating durations of 18 and 17 months also identified only a single Type B failure in each outage. The results of piping stress analysis which have been performed to assess the impact of snubbers which have failed to meet functional test acceptance criteria have shown that neither piping system functionality or structural integrity have ever been compromised.

During the recent cycle 6 operation Millstone 3 has experienced an extended midcycle shutdown, where temperature, vibration effects and normal wear on snubbers have been minimized as compared to a normal operating cycle. The last snubber surveillance interval inspections were completed during this midcycle shutdown. Although the calendar surveillance interval is impacted by this change the primary conditions that present challenges to snubbers have not been prevalent during the extended shutdown. Given the low failure rates of snubbers over the last 3 surveillance intervals, and the fact the operating time of the remainder of cycle 6 will be approximately 1 year, snubber failures are expected to be similar to previous intervals.

The service life of the snubbers or parts as required by Technical Specification 4.7.10.i will not be impacted by this change since the required replacements have already occurred and no additional service life dates will expire prior to September 10, 1999.

This change does not include any physical changes to the plant and does not affect the acceptance criteria or the required actions for functional failures of snubbers. A review for the possibility that this change could affect previously analyzed accidents has been performed, and it has been determined that there is no increase in the probability, increase in the consequences, or possibility of a different type of accident than that previously evaluated. A review for the possibility that this change could affect previously analyzed malfunctions of equipment important to safety has been performed and it has been determined

that there is no increase in the probability, increase in the consequences, or possibility of a different type of malfunction of equipment important to safety than that previously evaluated. Accordingly this change does not involve an unreviewed safety question.

A review for the possibility that this change could affect plant safety has been performed. Since there is no affect on the margins contained in any Technical Specification, or adverse effect on any equipment important to safety this change is considered safe.

Therefore, this proposed revision to Technical Specification Surveillance 4.7.10.e is safe and does not involve a 10CFR50.59 Unreviewed Safety Question.

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Attachment 4

Millstone Nuclear Power Station, Unit No. 3
Snubber Functional Test Inspection Interval (TSCR 3-25-98)

Significant Hazards Consideration and Environmental Considerations

December 1998

Significant Hazards Consideration

NNECO has reviewed the proposed revision in accordance with 10CFR50.92 and has concluded that the revision does not involve a significant hazards consideration (SHC). The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not satisfied. The proposed revision does not involve a SHC because the revision would not:

1. Involve a significant increase in the probability or consequence of an accident previously evaluated.

The proposed change is for a one time extension to the surveillance interval of snubber inspections required by Technical Specification 4.7.10.e. The change involves revising the calendar time for snubber interval inspections to 36 months to coincide with the time frame of the current cycle 6 operation.

Snubber testing experience at Millstone Unit No. 3 has shown that historical failure rates of snubbers are low. During the third refueling outage, after an operating cycle of approximately 22 months, the functional testing program identified multiple Type A failures attributed primarily to original plant construction, and resulted in a full inspection of all Type A snubbers. The snubber inspection interval was extended to approximately 30 months by a one-time extension to the Technical Specifications for the fourth refueling outage and only one Type A snubber failure was identified. Subsequent outages with operating durations of 18 and 17 months also identified only a single Type B failure in each outage. The results of piping stress analysis which have been performed to assess the impact of snubbers which have failed to meet functional test acceptance criteria have shown that neither piping system functionality or structural integrity have ever been compromised.

During the recent cycle 6 operation Millstone 3 has experienced an extended midcycle shutdown, where temperature, vibration effects and normal wear on snubbers have been minimized as compared to a normal operating cycle. The last snubber surveillance interval inspections were completed during this midcycle shutdown. Although the calendar surveillance interval is impacted by this change the primary conditions that present challenges to snubbers have not been prevalent during the extended shutdown. Given the low failure rates of snubbers over the last 3 surveillance intervals, and the fact the operating time of the remainder of cycle 6 will be approximately 1 year, snubber failures are expected to be similar to previous intervals.

Accordingly the possibility of a snubber failure leading to a Decrease in Reactor Coolant Inventory or a Decrease in Heat Removal by the Secondary System is not increased and there is no effect on the probability of previously evaluated accidents.

This change does not include any physical changes to the plant and does not affect acceptance criteria or the required actions for functional failures of snubbers. Accordingly there is no increase in the consequences of previously evaluated accidents resulting in a Decrease in Reactor Coolant Inventory or a Decrease in Heat Removal by the Secondary System

Thus it is concluded that the proposed revision does not involve a significant increase in the probability or consequence of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

This proposed revision to the surveillance interval does not change the operation of any plant system or component during normal or accident conditions. The proposed change extends the surveillance interval of snubber inspections required by Technical Specification 4.7.10.e. The change involves revising the calendar time for snubber interval inspections to coincide with the time frame of current cycle 6 operation. This change does not include any physical changes to the plant and does not affect acceptance criteria or the required actions for functional failures of snubbers.

Thus, this proposed revision does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety.

The proposed change extends the surveillance interval of snubber inspections required by Technical Specification 4.7.10.e. The change involves revising the calendar time for snubber interval inspections to coincide with the time frame of current cycle 6 operation. This change does not include any physical changes to the plant and does not affect acceptance criteria or the required actions for functional failures of snubbers. The service life of the snubbers or parts as required by Technical Specification 4.7.10.i will not be impacted by this change since the required replacements have already occurred and no additional service life dates will expire prior to September 10, 1999.

Thus, it is concluded that the proposed revision does not involve a significant reduction in a margin of safety.

In conclusion, based on the information provided, it is determined that the proposed revision does not involve an SHC.

Environmental Considerations

NNECO has reviewed the proposed license amendment against the criteria of 10CFR51.22 for environmental considerations. The proposed revision does not involve a SHC, does not significantly increase the type and amounts of effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, NNECO concludes that the proposed revision meets the criteria delineated in 10CFR51.22(c)(9) for categorical exclusion from the requirements for environmental review.