

March 3, 1999

Mr. Martin L. Bowling, Jr.
Recovery Officer - Technical Services
Northeast Nuclear Energy Company
c/o Ms. Patricia A. Loftus
Director - Regulatory Affairs
P. O. Box 128
Waterford, Connecticut 06385

SUBJECT: ISSUANCE OF AMENDMENT - MILLSTONE NUCLEAR POWER STATION, UNIT
NO. 3 (TAC NO. MA4302)

Dear Mr. Bowling:

The Commission has issued the enclosed Amendment No. 167 to Facility Operating License
No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application
dated December 4, 1998.

The amendment eliminates the need to cycle the plant and its components through a
shutdown-startup cycle by allowing the next snubber surveillance interval to be deferred until
the end of refueling outage 6 or September 10, 1999, whichever date is earlier.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in
the Commission's biweekly Federal Register notice.

Sincerely,
original signed by:
James W. Andersen, Project Manager
Project Directorate I-2
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 167 to NPF-49
2. Safety Evaluation

cc w/encls: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in black ink, appearing to be "JW Andersen", is written over the typed name and title.

James W. Andersen, Project Manager
Project Directorate I-2
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-423

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2. Safety Evaluation

cc w/encls: See next page

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Unit 3**

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Millstone Nuclear Power Station
Unit 3

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 167
License No. NPF-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northeast Nuclear Energy Company, et al. (the licensee) dated December 4, 1998, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.


2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 167, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Elinor G. Adensam, Director
Project Directorate I-2
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 3, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 167

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace the following page of the Appendix A, Technical Specifications, with the attached page. The revised page is identified by amendment number and contains vertical lines indicating the areas of change.

Remove

3/4 7-23

Insert

3/4 7-23

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.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 167

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

1.0 INTRODUCTION

By letter dated December 4, 1998, the Northeast Nuclear Energy Company, et al. (the licensee), submitted a request for a change to the Millstone Nuclear Power Station, Unit No. 3 Technical Specifications (TS). The requested change would eliminate the need to cycle the plant and its components through a shutdown-startup cycle by allowing the next snubber surveillance interval to be deferred until the end of refueling outage (RFO) 6 or September 10, 1999, whichever date is earlier.

2.0 BACKGROUND

Currently, Millstone Unit 3 TS 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 on September 23, 1997. Given the nominal 24-month surveillance interval, the 25 percent extension allowed by TS 4.0.2, and conservatively considering the beginning of the recently completed inspections as the start of the interval, the next snubber inspection interval would be required by March 10, 1999. The next RFO is presently scheduled for May 1999 (RFO6). Therefore, an additional plant shutdown would be required to complete the inspections, since many of the snubbers are not accessible during plant operation. The licensee's proposed revision of the TS would eliminate the need to cycle the plant and its components through a shutdown-startup cycle by allowing the next snubber surveillance interval to be deferred until the end of RFO6 or September 10, 1999, whichever date comes earlier. As a result, the actual calendar time for the present surveillance inspections would be up to 36 months, although the actual plant operation time will be approximately 1 year.

3.0 EVALUATION

The snubbers prevent unrestrained pipe motion under dynamic loads, such as those caused by earthquakes or severe dynamic transients, while allowing normal thermal motion. The periodic tests assure that the snubbers will function properly when needed. Millstone Unit 3 uses two sample plans to test the four types 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 the snubbers. Under the 37 plan, an initial test sample size of 37 snubbers is tested. Each plan requires an additional test sample, equal to approximately one half the initial sample size, 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 in that each requires additional testing when functional failures are identified. The nature of each test plan is independent of the test interval initiating the inspections and, accordingly, is not impacted by the extended interval.

In its December 4, 1998, submittal, the licensee indicated that snubber testing experience at Millstone Unit 3 has shown that the 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. These were attributed primarily to original plant construction, and resulted in a full inspection of all Type A snubbers. The snubber inspection interval was then extended to approximately 30 months by a one-time extension to the TS for the fourth refueling outage. Only one Type A snubber failure was identified. Subsequent outages after operating durations of 18 and 17 months resulted in only a single Type B failure identified during each outage. In addition, the licensee stated that the results of piping stress analyses, 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 Unit 3 experienced an extended mid-cycle shutdown. Therefore, temperature, vibration effects, and normal wear on snubbers were minimized as compared to a normal operating cycle. The last snubber surveillance interval inspections were completed during this mid-cycle shutdown. Although the calendar surveillance interval is impacted by this TS change, the primary conditions that present challenges to snubbers were not prevalent during the extended shutdown. Given the low failure rates of snubbers over the last three surveillance intervals, and the fact the operating time of the remainder of cycle 6 will be approximately 1 year, the staff is in agreement with the licensee's contention that snubber failures are expected to be similar to previous intervals.

The licensee also stated, in its December 4, 1998, submittal that the service life of the Millstone Unit 3 snubbers, as required by TS 4.7.10.i, will not be impacted by this TS change since the required replacements have already occurred and no additional service life dates will expire prior to September 10, 1999. This is acceptable to the staff.

3.1 Overall

Millstone Unit 3 was shut down for an extended period of time during the current fuel cycle and the refueling outage schedules are no longer synchronous with the 24-month surveillance requirements for snubbers in the plant TS. On the basis of the evaluation performed by the licensee, which concluded that the proposed revision to TS Surveillance 4.7.10.e is safe, the staff concludes that the expected snubber performance for the current operating cycle would be comparable to that which would be seen during the maximum currently allowed TS surveillance interval. Therefore, the staff finds the proposed surveillance interval extension acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (63 FR 71971). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: A. Lee

Date: March 3, 1999