

March 9, 1993

Docket No. 50-423

Mr. John F. Opeka
Executive Vice President, Nuclear
Connecticut Yankee Atomic Power Company
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, Connecticut 06141-0270

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Dear Mr. Opeka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. M85470)

The Commission has issued the enclosed Amendment No. 78 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated January 15, 1993, supplemented January 21, 1993.

The amendment revises the Millstone Unit No. 3 Technical Specifications, Section 4.7.10.e by extending the surveillance requirement frequency for the snubber functional tests by allowing a one-time extension to the current 18-month surveillance, plus the additional 25 percent allowed by Technical Specification 4.0.2. The amendment closes the temporary waiver of compliance issued on January 25, 1993.

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

Sincerely,

Original signed by

Vernon L. Rooney, Senior Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 78 to NPF-49
2. Safety Evaluation

cc w/enclosures:

See next page

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| OFFICE | LA:PDI-4 | PM:PDI-4 | D:PDI-4 | OGC | |
| NAME | SNorris | VRooney:cn | JStolz | MZOBLER | |
| DATE | 2/17/93 | 2/18/93 | 2/18/93 | 2/24/93 | 1/1 |

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of comment
period, 3/8/93

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Mr. John F. Opeka
Northeast Nuclear Energy Company

Millstone Nuclear Power Station
Unit 3

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

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 78
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 January 15, 1993, supplemented January 21, 1993, 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. 78 , 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 its issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 9, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 78

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace the following page of the Appendix A Technical Specifications with the enclosed 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 per 18 months* thereafter during shutdown, 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 that the surveillance requirement due no later than January 22, 1993, may be deferred until the next refueling outage, but no later than September 30, 1993, whichever is earlier.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 78

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 January 15, 1993, supplemented January 21, 1993, the Northeast Nuclear Energy Company (NNECO/the licensee) requested changes to the Technical Specifications (TS) for Millstone, Unit 3. The proposed changes will revise the Millstone, Unit 3 Technical Specifications, Section 4.7.10.e by extending the surveillance requirement frequency for the snubber functional tests by allowing a one-time extension to the current 18-month surveillance, plus the additional 25 percent allowed by Technical Specification 4.0.2. Specifically, the proposed change will defer the functional tests until the 1993 (fourth) refueling outage, but not beyond September 30, 1993. The licensee requested that the license amendment be processed on an emergency basis in accordance with 10 CFR 50.91(a)(5), in that failure to act on this proposed amendment would result in a plant shutdown. This extension would represent an additional time period of approximately 8 months to the basic 18-month interval, plus 25 percent (22.5 months), for a total interval of approximately 31 months.

By telephone conference with the licensee's staff on January 22, 1993, and confirmed by letter dated January 25, 1993, the NRC issued a Temporary Waiver of Compliance from Technical Specification 4.7.10.e by allowing a one-time extension to the current 18-month snubber surveillance interval, plus the additional 25 percent allowed by Technical Specification 4.0.2. The Temporary Waiver of Compliance deferred the required test until the next refueling outage, but no later than September 30, 1993. Because the Temporary Waiver of Compliance removed the immediate requirement for plant shutdown, this amendment has been processed with the normal 30-day period for public comment rather than on an emergency basis.

2.0 DISCUSSION AND EVALUATION

NNECO assessed the effects of the proposed extension to the functional testing interval and concluded that the proposed change still results in an adequate level of confidence in the reliability of the snubber population.

The licensee identified four groups of snubbers:

- Type A - small mechanical (i.e., PSA- $\frac{1}{4}$, $\frac{1}{2}$),
- Type B - medium mechanical (i.e., PSA-1, 3, 10),
- Type C - large mechanical (i.e., PSA-35, 100), and
- Type D - large hydraulic (i.e., Paul-Munroe).

During the last refueling outage, a total of 291 snubbers (231 Type A, 43 Type B, 12 Type C, and 5 Type D) were functionally tested. Nineteen failures were reported, 16 of which were considered actual functional test failures attributable to installation, maintenance or operation, and 3 which were determined to have been damaged during testing. All of the failures occurred on the Type A snubbers; no functional failures were identified for the other types of snubbers (i.e., Types B, C, or D). The entire population of Type A snubbers (231) was functionally tested based upon the observed failure rate of the initial sample.

The licensee performed root cause of failure analyses for the 16 snubbers which failed their functional test. Results of the analyses indicate that one failure was caused by contact with corrosive agents, eight failures were likely caused by operational vibration or transients, and seven failures were likely caused by improper installation, or mishandling and misuse during the performance of maintenance activities (external loadings). The licensee also noted that 13 of the 16 snubbers that failed their functional test were located in the steam generator cubicles. Such locations appear to be a common factor among many of the failures due to piping configuration and space limitations. The licensee has implemented corrective actions to prevent recurrence of the failures caused by corrosion and external loadings.

To verify that the replaced and reinstalled Type A snubbers had not sustained any damage from the time between installation and startup of the current cycle, NNECO visually inspected all of the Type A snubbers. No damage was observed. NNECO has also committed to test those snubbers which failed during the last functional test during the upcoming outage to verify whether their corrective actions were adequate and to assess whether changes to system configurations or support locations may be required to alleviate the effects of operational vibration and transients.

Based on the above, the staff finds that the licensee has taken reasonable and adequate measures to ensure the operability of snubbers, and that the proposed extension of the current functional testing interval to not beyond September 30, 1993, is acceptable.

In its January 15, 1993 submittal, the licensee has suggested that the ASME O&M Code - 1990, "Code for Operation and Maintenance of Nuclear Power Plants," Subsection ISTD 7.4, "Inservice Operability Testing Interval," further enhances their argument that confidence in the reliability of their snubber

population is not diminished by the extension of the functional testing interval, in that ISTD 7.4 sets the inservice operability testing of snubbers at refueling outages rather than at an 18-month interval. NNECO's interpretation of this provision would then suggest that the confidence level is independent of the testing interval so long as one of the approved sampling plans are used.

The staff disagrees with the licensee's suggestion that the language in ISTD 7.4 keys the testing of snubbers at refueling outages without regard to the length of the testing interval. Rather, the staff's view regarding the term "refueling outage" as used in ISTD 7.4, is that the term is based on an 18-month interval, as stated in ISTD 6.5.2, "Subsequent Examination Intervals," and that, absent additional justification, sample sizes must be proportionally adjusted to account for increases to the basic inspection interval.

This issue, however, does not affect the acceptability of the licensee's proposed extension since the licensee will have functionally tested roughly 70 percent of the 935 snubbers which comprise the total population of snubbers, by the end of the next refueling outage.

Based on our review, the staff concludes that adequate bases have been provided to permit the one-time extension of the snubber functional testing interval from 18 months plus 25 percent (22.5 months) to the 1993 (fourth) refueling outage, but not beyond September 30, 1993, and that the licensee has taken reasonable and adequate measures to ensure the operability of snubbers such that the proposed extension of the current functional testing interval to not beyond September 30, 1993, does not result in an undue risk to public health and safety.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment 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 (58 FR 7265). 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.

5.0 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: T. Chan

Date: March 9, 1993