

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

## NORTHEAST NUCLEAR ENERGY COMPANY

## DOCKET NO. 50-245

### MILLSTONE NUCLEAR POWER STATION, UNIT 1

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 71 License No. DPR-21

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Northeast Nuclear Energy Company (the licensee), dated September 10, 1993, as supplemented November 12, 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.

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- 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. DPR-21 is hereby amended to read as follows:
  - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 71, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

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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: December 28, 1993

# ATTACHMENT TO LICENSE AMENDMENT NO. 71

# FACILITY OPERATING LICENSE NO. DPR-21

## DOCKET NO. 50-245

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

Remove	Insert
3/4 6-15	3/4 6-15
3/4 6-16	3/4 6-16
3/4 6-17	3/4 6-17
3/4 6-17a	3/4 6-17a
	3/4 6-20
B 3/4 6-7	B 3/4 6-7

## LIMITING CONDITION FOR OPERATION

#### 3.6 PRIMARY SYSTEM BOUNDARY

## I. SNUBBERS

- During all modes of operation except COLD SHUTDOWN and REFUEL CONDITION, all safety-related snubbers shall be OPERABLE.
- 2. If a snubber is determined to be inoperable, continued reactor operation is permissible only during the 72 hours following such determination unless the snubber is sooner replaced, made OPERABLE, or an engineering evaluation determined the supported system/component to be OPERABLE with the inoperable snubber.
- 3. If the requirements of 3.6.I.1 and 3.6.I.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the COLD SHUTDOWN or REFUEL CONDITION within 36 hours.
- If a snubber is determined to be inoperable while the reactor is in the COLD SHUTDOWN or REFUEL CONDITION, the snubber shall be made OPERABLE, or replaced, prior to reactor startup.

### SURVEILLANCE REQUIREMENT

## 4.6 PRIMARY SYSTEM BOUNDARY

### I. SNUBBERS

Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program.

As used in this specification, TYPE of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

### 1. Visual Inspection

Snubber are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible or accessible) may be inspected independently according to the schedule determined by Table 4.6-1. The visual inspection interval for each category of snubber shall be determined based upon the criteria provided in Table 4.6-1 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval.

#### SURVEILLANCE REQUIREMENT (Continued)

#### 2. Visible Inspection Acceptance Criteria

Visual inspections shall verify that (1) the snubber has no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are functional, and (3) fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified as acceptable for the purpose of establishing the next visual inspection interval, provided that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined operable per Specification 4.6.I.4(a) or 4.6.I.4(b). In an instance where the snubber cannot be tested in the as-found condition, it shall be classified as unacceptable.

Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions, such as temperature, radiation, and vibration.

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 requirements of 3.6.I shall be met.

## 3. <u>Snubber Tests</u>

At least once per twenty four (24) months, during shutdown, a representative sample (10% of the total of each type of snubbers, mechanical and hydraulic, in use in the plant) shall be tested either in place or in a bench test. For each snubber that does not meet the test acceptance criteria of Specification 4.6.I.4(a) or 4.6.I.4(b), as applicable, an additional 5% of that type of snubber shall be tested.

Testing shall continue until no additional inoperable snubbers are found within a sample or until all snubbers have been tested. The representative sample selected for testing shall include the various configurations, the range of size and capacity of snubbers, and the operating environment of all snubbers.

#### SURVEILLANCE REQUIREMENT (Continued)

In addition to the regular sample, additional snubbers shall be tested where the previous test showed failures. If observed failure was caused by the snubber itself (i.e., poor maintenance, degraded components, etc.) and not caused by the operating environment, the snubber unit which failed shall be tested (if it was returned to service). If the observed failure was caused by the operating environment, the snubber installed at that location shall be tested. If no determination was made regarding the cause of failure, both the snubber which failed and the snubber installed at that location shall be tested. Test results of these snubbers may not be included for the resampling. All replacement snubbers shall have been tested prior to installation.

### 4. Snubber Test Acceptance Criteria

The snubber tests shall verify that:

(a) For hydraulic snubbers:

Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression, and snubber bleed or release rate, where required, is within the specified range in compression or tension.

(b) For mechanical snubbers:

The force that initiates and maintains free movement of the snubber rod in either tension or compression is less than the specified maximum drag force; and activation (restraining action) is achieved within the specified range in compression and tension.

### 5. Functional Test Failure Analysis

If any snubber selected for testing either fails to lock-up or fails to move (i.e., frozen in place), the cause will be evaluated and if caused by manufacturer design deficiency, all snubbers of the same design subject to the same defect shall be tested regardless of location or difficulty of removal. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the test acceptance criteria.

For the snubber(s) found inoperable, an engineering evaluation shall be performed on the components to which the inoperable snubber(s) are attached. The purpose of this engineering evaluation shall be to determine if the components attached to the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the design service.

### SURVEILLANCE REQUIREMENT (Continued)

## 6. <u>Snubber Service Life Program</u>

The service life of hydraulic and mechanical snubbers shall be monitored to ensure that the service life is not exceeded between surveillance inspections. The maximum expected service life for various seals and other critical parts shall be determined and established based on engineering information and shall be extended or shortened based on monitored test results and failure history. Critical parts shall be replaced so that the maximum service life will not be exceeded during a period when the snubber is required to be OPERABLE. The parts replacements shall be documented and the documentation shall be retained in accordance with Specification 6.10.

Table 4.6-1					
SNUBBER	VISUAL	INSPECTION	INTERVAL		

	Number of Unacceptable Snubbers			
Population or Category Size (Notes 1 and 2)	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)	
1	0	0	1	
80	0	C	2	
100	0	1	4	
150 or greater	0	3	8	

- Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, that decision must be made and documented before any inspection and shall be used as the basis upon which to determine the next inspection interval for that category.
- Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.
- Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.
- Note 4: If the number of unacceptable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.
- Note 5: If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be twothirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.
- Note 6: The provisions of definition 1.0.X "Surveillance" are applicable for all inspection intervals up to and including 48 months.

Amendment No. 71

#### 3.6 PRIMARY SYSTEM BOUNDARY

### BASES

### I. <u>Snubbers</u>

All snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained. Snubbers excluded from this inspection program are those installed on non-safety related systems and then only if their failure, or failure of the system on which they are installed, would have no adverse effect on any safety related system.

Performance of periodic visual inspections of snubbers complements the functional cesting program and provides additional confidence in snubber operability. The inspection schedule is based on the number of unacceptable snubbers found during the previous inspection in proportion to the sizes of the various snubber populations. The interval may be as long as 48 months with good overall visual inspection results. The NRC Staff stated, in Generic Letter 90-09, "Alternative requirements for Snubber Visual Inspection Intervals and Corrective Actions," that the alternate schedule for visual inspection maintains the same confidence level in snubber operability as previously accepted schedules, while allowing the flexibility to perform the inspections and corrective actions and corrective actions.

Snubbers which fail the acceptance criteria of the visual inspections are classified as unacceptable and may be reclassified as acceptable for the purpose of establishing the next visual inspection interval, provided that (1) the cause of the rejection is clearly established and remedied for that particular sucher and for other snubbers irrespective of type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined operable per Specifications 4.6.I.4(a) or (b). In an instance where the snubber cannot be tested in the as-found condition, it is classified as unacceptable.

For the snubbers found unacceptable, an engineering evaluation is performed on the components to which the snubbers are attached. The purpose of this evaluation is to determine if the components to which the snubbers are attached were adversely affected.

To provide assurance of snubber reliability, a representative sample of the installed snubbers will be tested during plant shutdowns at twentyfour (24) month intervals. Observed failures of these sample snubbers shall require testing of additional units.

Hydraulic snubbers and mechanical snubbers may each be treated as a different entity for the above surveillance programs.