

September 4, 1996

Mr. Ted C. Feigenbaum  
Executive Vice President and  
Chief Nuclear Officer  
Northeast Utilities Service Company  
c/o Mr. Terry L. Harpster  
Director - Nuclear Licensing Services  
P.O. Box 128  
Waterford, CT 06385

SUBJECT: ISSUANCE OF AMENDMENT RELATING TO TESTING SEALED SOURCES FOR  
CONTAMINATION AND LEAKAGE - MILLSTONE NUCLEAR POWER STATION,  
UNIT NO. 2 (TAC NO. M95180)

Dear Mr. Feigenbaum:

The Commission has issued the enclosed Amendment No. 202 to Facility Operating  
License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2, in  
response to your application dated March 28, 1996.

The amendment changes Technical Specification Section 3.7.7, "Sealed Source  
Contamination," and its Bases that modify the criteria for testing sealed  
sources for contamination and leakage. The approved changes are consistent  
with the testing criteria currently used at the Millstone Nuclear Power  
Station, Unit No. 3, the Haddam Neck Plant and the Seabrook Station.

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:

Daniel G. McDonald Jr., Sr. Project Manager  
Northeast Utilities Project Directorate  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 202 to DPR-65  
2. Safety Evaluation

cc w/encls: See next page

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Northeast Utilities Service Company

**Millstone Nuclear Power Station**  
Unit 2

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

NORTHEAST NUCLEAR ENERGY COMPANY

THE CONNECTICUT LIGHT AND POWER COMPANY

THE WESTERN MASSACHUSETTS ELECTRIC COMPANY

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 202  
License No. DPR-65

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 March 28, 1996, 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. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 202, 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 issuance, to be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Phillip F. McKee, Director  
Northeast Utilities Project Directorate  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: September 4, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 202

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

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

Remove

3/4 7-19  
B3/4 7-5

Insert

3/4 7-19  
B3/4 7-5

## PLANT SYSTEMS

### 3/4.7.7 SEALED SOURCE CONTAMINATION

#### LIMITING CONDITION FOR OPERATION

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3.7.7.1 Each sealed source containing radioactive material either in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material shall be free of  $\geq 0.005$  microcuries of removable contamination.

APPLICABILITY: AT ALL TIMES.

ACTION:

- a. Each sealed source with removable contamination in excess of the above limit shall be immediately withdrawn from use and:
  1. Either decontaminated and repaired, or
  2. Disposed of in accordance with Commission Regulations.
- b. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.7.1.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.7.1.2 Test Frequencies - Each category of sealed sources shall be tested at the frequencies described below.

- a. Sources in use (excluding startup sources previously subjected to core flux) - At least once per six months for all sealed sources containing radioactive material:

## PLANT SYSTEMS

### BASES

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#### 3/4.7.7 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(a)(3) limits for plutonium. Leakage of sources excluded from the requirements of this specification represent less than one maximum permissible body burden for total body irradiation if the source material is inhaled or ingested.

#### 3/4.7.8 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-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.

A list of individual snubbers with detailed information of snubber location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Plant Operations Review Committee. The determination shall be based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guide 8.8 and 8.10. The addition or deletion of any hydraulic or mechanic snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 202

TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY

THE CONNECTICUT LIGHT AND POWER COMPANY

THE WESTERN MASSACHUSETTS ELECTRIC COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By letter dated March 28, 1996, the Northeast Nuclear Energy Company, et al. (the licensee) submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 2 (Millstone Unit 2), Technical Specifications (TSs). The requested changes would change TS 3.7.7, "Sealed Source Contamination," and its Bases that modify the criteria for testing sealed sources for contamination and leakage. The changes are consistent with the testing criteria currently used at the Millstone Nuclear Power Station, Unit No. 3, the Haddam Neck Plant, and the Seabrook Station.

2.0 EVALUATION

Currently, Section 3.7.7 of the TSs for Millstone Nuclear Power Station, Unit No. 2, states that "each sealed source containing radioactive material either in excess of those quantities of byproduct material listed in 10 CFR 30.71 or 0.1 microcuries, including alpha emitters, shall be free of  $\geq 0.005$  microcuries of removable contamination." The quantities of byproduct material listed in 10 CFR 30.71 range from 0.1 to 1000 microcuries, depending on the particular radioisotope.

The licensee proposes to change the criteria for testing sealed sources for contamination and leakage at Millstone Unit 2 to the same as the criteria at Millstone Unit 3, the Haddam Neck Plant, and the Seabrook Station.

Specifically, the sealed sources that are required to be free of greater than or equal to 0.005 microcuries of removable contamination are those that will exceed "100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material." Although the proposed change increases the quantities of sealed source byproduct material that can be

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stored without requiring contamination and leak testing for some radionuclides, the actual radiological material content of a sealed source that will require routine leak testing is still small. The proposed TS changes do not change the allowable leakage (less than 0.005 microcuries of removable contamination) for sealed sources. This allowable leakage is small and would not cause any significant radiation exposure to the workers or to the public. The area where the sealed sources are stored at the Millstone Unit 2, is routinely surveyed by Health Physics in accordance with Health Physics Department procedures and any significant leakage would be detected.

As previously noted, the proposed changes to the TSs will make the criteria for testing sealed sources for contamination and leakage at Millstone Unit 2 the same as those at Millstone Unit 3, the Haddam Neck Plant, and the Seabrook Station. The TSs for sealed source contamination at these other plants have been previously approved by the staff. Therefore, since the proposed changes are consistent with those previously approved and the changes do not modify the allowable leakage for sealed sources, the staff finds the licensee's proposed changes to the sealed source contamination TS 3.7.7 and supporting Bases to be acceptable.

### 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 a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (61 FR 20853). 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: C. Hinson

Date: September 4, 1996