March 28, 1988

Docket No. 50-336

Mr. Edward J. Mroczka
Senior Vice President
Nuclear Engineering and Operations
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, Connecticut 06141-0270

Dear Mr. Mroczka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NOS. 67040 AND 66954)

The Commission has issued the enclosed Amendment No. 127 to Facility Operating License No. DPR-65 for Millstone Nuclear Power Station, Unit No. 2, in response to your applications dated December 23, 1987 and February 3, 1988.

The amendment revises the Technical Specifications to delete the chlorine detection system from Technical Specification (TS) 3/4.3.3.6. In addition, the amendment revises TS Table 3.9-1, "Access Doors to Spent Fuel Pool Area," to reflect the installation of a new access door to the spent fuel pool area.

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

Sincerely,

Original signed by

David H. Jaffe, Project Manager
Project Directorate I-4
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 127 to DPR-65
2. Safety Evaluation

cc w/enclosures:
See next page

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

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 127
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment by Northeast Nuclear Energy Company, et al. (the licensee) dated December 23, 1987 and February 3,1988, comply 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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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. 127 , 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.

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 28, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 127

FACILTIY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are provided tc maintain document completeness.

Remove	Insert
3/4 3-42	3/4 3-42
3/4 9-15	3/4 9-15
B3/4 3-4	B3/4 3-4

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Wide Range Logarithmic Neutron Flux	M	N.A.
2. Reactor Trip Breaker Indication	M	N.A.
3. Reactor Cold Leg Temperature	M	R
4. Pressurizer Pressure		
a. Low Range	M	R
b. High Range	M	R
5. Pressurizer Level	M	R
6. Steam Generator Level	M	R
7. Steam Generator Pressure	M	R

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TABLE 3.9-1

ACCESS DOORS TO SPENT FUEL POOL AREA

Door No.	Elevation	Location	Type	Area Serviced
291	14'6"	M.7-18.5	Double Door	SFP Skimmer System
292 or 207	14'6"	R/S-18.9	Double Door or 8' Rollup Door	Solidification System
293	14'6"	Q/R-18.0	Double Door	Maintenance Shop
208	14'6"	S-18.9	16' Rollup Door	Railway Access
294	14'6"	Q-20.7	Single Door	D/G Room
295	38'6"	F.8-18	8' Rollup Door	Aux. & R. W. HVAC
296	38'6"	F.8-18.5	Single Door	Aux. & R. W. HVAC
297	38'6"	F.8-18.5	Single Door	North Stairwell
---	38'6"	H.4-18.9	Double Sliding Door	Elevator
298	38'6"	M.4-18.9	Single Door	Penetration Room
299	38'6"	M.7-18.9	Double Door	Main Exh. Fan Room
247	38'6"	M.7-17.2	Single Door	South Stairwell
254	55'6"	S-17.2	Single Door	Roof Above Storage Floor
253	55'6"	S-18.9	Single Door	Roof Above F. O. Tanks
274	38'6"	R-17.2	Single Door	Area below Mezzanine

REFUELING OPERATIONS

STORAGE POOL AREA VENTILATION SYSTEM - FUEL STORAGE

LIMITING CONDITION FOR OPERATION

3.9.15 At least one Enclosure Building Filtration System shall be OPERABLE and capable of automatically initiating operation in the auxiliary exhaust mode and exhausting through HEPA filters and charcoal adsorbers on a storage pool area high radiation signal.

APPLICABILITY: WHENEVER IRRADIATED FUEL IS IN THE STORAGE POOL.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool until at least one spent fuel storage pool ventilation system is restored to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.9.15 The above required Enclosure Building Filtration System shall be demonstrated OPERABLE:

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours with the heaters on.

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

3/4.3.3.2 INCORE DETECTORS

The OPERABILITY of the incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the reactor core.

3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility.

3/4.3.3.4. METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public. This instrumentation is consistent with the recommendations of Regulatory Guide 1.23 "Onsite Meteorological Programs."

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT SHUTDOWN of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

3/4.3.3.6 Fire Detection Instrumentation

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

3/4.3.3.7 Accident Monitoring Instrumentation

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations".

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 127

TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

INTRODUCTION

By applications for license amendments dated December 23, 1987 and February 3, 1988, Northeast Nuclear Energy Company (the licensee/NNECO) requested changes to the Technical Specifications (TS). The changes would revise the TS to delete the chlorine detection system from Technical Specification (TS) 3/4.3.3.6. In addition, the proposed changes would revise TS Table 3.9-1, "Access Doors to Spent Fuel Pool Area," to reflect the installation of a new access door to the spent fuel pool area.

DISCUSSION AND EVALUATION

The chlorine detection system was placed in the Control Room Ventilation System to assure the habitability of the control room in the event of an on-site chlorine release or an off-site chlorine release with potential on-site consequences. The chlorine of concern was 55 tons, stored in a railroad tank car, for use in water treatment. The chlorination systems of Millstone Units 1, 2 and 3 have been modified to use sodium hypochlorite solution instead of gaseous chlorine. Therefore, the on-site storage of liquid chlorine has been eliminated.

Chlorine rail traffic on the Amtrack right-of-way through Northeast Utilities property was a concern because of the close proximity to Millstone Unit No. 2 (1700 feet) and the large quantity of chlorine contained in a rail tank car (typically 55 tons). NNECO contracted Providence and Worcester Railroad (P&W) to perform a Millstone Nuclear Power Station Chlorine Rail Traffic Study. The results of this study indicated that there was no chlorine rail traffic on this right-of-way in 1986 and for the years 1983 through 1985 the average chlorine rail traffic was two carloads per year. Based upon the data obtained for the years 1983-1986, NNECO does not anticipate any increase in the chlorine rail traffic in the vicinity of the Millstone Station. However, in order to monitor any future changes, NNECO has contracted with P&W to provide NNECO with annual updates to the Millstone Nuclear Power Station Chlorine Rail Traffic Study through the year 1991. NNECO determined that shipments of liquid chlorine by barge or truck will have no adverse impact on the safety of the Millstone Station, due to the decreasing use of Long Island Sound as a shipping channel and the four mile distance of the nearest interstate highway from the site.

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Regulatory Guide 1.78 specifies that only frequently shipped hazardous chemicals need to be addressed in the plant design. Frequent shipments are defined in Regulatory Guide 1.78 as exceeding 10 per year for truck shipments, 30 per year for rail shipments, and 50 per year for barge shipments. The chlorine shipments identified above are below these thresholds.

NNECO has evaluated the potential effect of chlorine released from an off-site chlorine bulk storage facility and has determined that no hazard exists. The New London Water Treatment Facility was identified as a bulk storage facility of chlorine which utilizes two ton cylinders and is located four miles from Millstone Unit No. 2. Based on the small containers utilized and the four mile distance, the New London Water Treatment Facility does not represent a credible hazard to the Millstone Unit No. 2 Control Room (as per Regulatory Guide 1.78).

The Pfizer Pharmaceutical Company was also identified as a bulk storage facility of chlorine. This facility utilizes rail tank cars for chlorine storage and is located five miles from Millstone Unit No. 2. Regulatory Guide 1.78 states that "chemicals stored at distances greater than five miles from the facility need not be considered because if a release occurs at such a distance, atmospheric dispersion will dilute and disperse the incoming plume to such a degree that there should be sufficient time for the Control Room operators to take appropriate action." Based on this principle, the Pfizer Pharmaceutical Company storage facility was evaluated and determined not to be a hazard to Millstone Unit No. 2.

In summary, based upon the elimination of on-site chlorine bulk storage, verification of low chlorine rail frequency, and the absence of potentially hazardous off-site chlorine bulk storage facilities, the elimination of the Millstone Unit No. 2 Technical Specification requirements for Control Room Ventilation System Chlorine Detectors in TS 3/4.3.3.6 is acceptable.

With regard to the spent fuel pool access door, Table 3.9-1 of the TS contains a list of access doors to the spent fuel pool area which are subject to the Limiting Conditions for Operation (LCO) and Surveillance Requirements (SR) of TS 3/4.9.14, "Storage Pool Area Ventilation System - Fuel Movement." The licensee proposes to amend the list of doors in TS Table 3.9-1 by adding Door 274 which is a single door located in the area below the mezzanine in the auxiliary building.

Door 274 was installed in a manner which maintains the structural integrity of the auxiliary building walls. In addition, Door 274 is of the same design, including provisions for fire protection, as doors already incorporated in TS Table 3.9-1.

During fuel movement, or movement of loads over the spent fuel pool, TS 3.9.14 requires the access doors in TS Table 3.9-1 to be closed and the Enclosure Building Filtration System, operating in the auxiliary exhaust mode, to be in operation. Thus, in the event of a fuel or heavy load accident in the spent fuel pool, any air leakage due to Door 274 would be into the spent fuel pool area thus preventing an unfiltered release. In addition, Door 274 was designed and installed so as to retain the original structural design margins for the auxiliary building and provide an equivalent level of fire resistance to that provided by other access doors to the spent fuel pool area.

Based upon the above, the proposed change to TS Table 3.9-1 is acceptable.

ENVIRONMENTAL CONSIDERATION

This 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 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 published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. 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.

CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 28, 1988

Principal Contributor: D. H. Jaffe