August 26, 1997

Neil S. Carns and Chief Nuclear Officer Northeast Nuclear Energy Company c/o Ms. Patricia A. Loftus Director - Regulatory Affairs P.O. Box 128 Waterford, CT 06385

SUBJECT: ISSUANCE OF AMENDMENT RELATING TO THE RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION - MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 (TAC NO. M94105)

Dear Mr. Carns:

The Commission has issued the enclosed Amendment No. 207 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2, in response to your application dated November 20, 1995.

The amendment changes the Technical Specifications (TSs) by providing clarifications to the applicability and action statements in TS Table 3.3-12 relating to the Steam Generator Blowdown Monitor and the Condensate Polishing Facility Waste Neutralizing Sump radiation monitor.

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

Sincerely,

Original signed by: Daniel G. McDonald Jr., Sr. Project Manager Special Projects Office - Licensing Office of Nuclear Reactor Regulation

DEDI

Docket No. 50-336

Enclosures: 1. Amendment No. 207 to DPR-65 2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION: Docket File PUBLIC SPO-L Plant SPO Reading WTravers PMcKee LBerry DMcDonald CMiller THarris (e-mail SE only) OGC GHill (2) WBeckner, TSB ACRS JDurr, RI

NRC FILE GENTER GOPY

| DOCUMENT NAME: G:\MCDONALD\M94105.AMD To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/epotosure "N" = No copy | | | | | | | | | | | |
|--|-------------|------------|--------------|----------|-----------|--|--|--|--|--|--|
| OFFICE | SPO-L:PM | SPO-L:LA | PERB AND C | OGC 1/30 | SPO-4:00/ | | | | | | |
| NAME | DMcDonald) | LBerry V(p | CMiller on | | РМскее | | | | | | |
| DATE | 08/198/97 | 07/23/97 | 08/12/97 CLM | 09/14/97 | 08/21/97 | | | | | | |

OFFICIAL RECORD COPY







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

August 26, 1997

Mr. Neil S. Carns
Senior Vice President

and Chief Nuclear Officer

Northeast Nuclear Energy Company
c/o Ms. Patricia A. Loftus
Director - Regulatory Affairs
P.O. Box 128
Waterford, CT 06385

SUBJECT: ISSUANCE OF AMENDMENT RELATING TO THE RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION - MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 (TAC NO. M94105)

Dear Mr. Carns:

The Commission has issued the enclosed Amendment No. 207 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2, in response to your application dated November 20, 1995.

The amendment changes the Technical Specifications (TSs) by providing clarifications to the applicability and action statements in TS Table 3.3-12 relating to the Steam Generator Blowdown Monitor and the Condensate Polishing Facility Waste Neutralizing Sump radiation monitor.

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

Sincerely,

Daniel G. McDonald Jr., Sr. Project Manager Special Projects Office - Licensing Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 207 to DPR-65 2. Safety Evaluation

cc w/encls: See next page

Northeast Nuclear Energy Company

cc:

Lillian M. Cuoco, Esquire Senior Nuclear Counsel Northeast Utilities Service Company P. O. Box 270 Hartford, CT 06141-0270

Mr. John Buckingham Department of Public Utility Control Electric Unit 10 Liberty Square New Britain, CT 06051

Mr. Kevin T. A. McCarthy, Director Monitoring and Radiation Division Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

First Selectmen Town of Waterford Hall of Records 200 Boston Post Road Waterford, CT 06385

Mr. Wayne D. Lanning Deputy Director of Inspections Special Projects Office 475 Allendale Road King of Prussia, PA 19406-1415

Charles Brinkman, Manager Washington Nuclear Operations ABB Combustion Engineering 12300 Twinbrook Pkwy, Suite 330 Rockville, MD 20852

Senior Resident Inspector Millstone Nuclear Power Station c/o U.S. Nuclear Power Station P.O. Box 513 Niantic, CT 06357 Millstone Nuclear Power Station Unit 2

Mr. F. C. Rothen Vice President - Work Services Northeast Nuclear Energy Company P. O. Box 128 Waterford, CT 06385

Ernest C. Hadley, Esquire 1040 B Main Street P.O. Box 549 West Wareham, MA 02576

Mr. D. M. Goebel Vice President - Nuclear Oversight Northeast Nuclear Energy Company P. O. Box 128 Waterford, CT 06385

Mr. M. L. Bowling, Jr. Recovery Officer - Millstone Unit 2 Northeast Nuclear Energy Company P. O. Box 128 Waterford, CT 06385

Mr. J. K. Thayer
Recovery Officer - Nuclear Engineering and Support
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385

Mr. B. D. Kenyon President and Chief Executive Officer Northeast Nuclear Energy Company P. O. Box 128 Waterford, Connecticut 06385

Mr. Allan Johanson, Assistant Director Office of Policy and Management Policy Development and Planning Division
450 Capitol Avenue - MS# 52ERN
P. O. Box 341441
Hartford, CT 06134-1441 Northeast Nuclear Energy Company

Millstone Nuclear Power Station Unit 2

cc:

Citizens Regulatory Commission ATTN: Ms. Susan Perry Luxton 180 Great Neck Road Waterford, Connecticut 06385

Deborah Katz, President Citizens Awareness Network P. O. Box 83 Shelburne Falls, MA 03170

The Honorable Terry Concannon Co-Chair Nuclear Energy Advisory Council Room 4035 Legislative Office Building Capitol Avenue Hartford, Connecticut 06106

Mr. Evan W. Woollacott Co-Chair Nuclear Energy Advisory Council 128 Terry's Plain Road Simsbury, Connecticut 06070

Little Harbor Consultants, Inc. Millstone - ITPOP Project Office P. O. Box 0630 Niantic, Connecticut 06357-0630

Mr. Daniel L. Curry Project Director Parsons Power Group Inc. 2675 Morgantown Road Reading, Pennsylvania 19607

Mr. Don Schopfer Verification Team Manager Sargent & Lundy 55 E. Monroe Street Chicago, Illinois 60603



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. 207 License No. DPR-65

- The Nuclear Regulatory Commission (the Commission) has found that: 1.
 - Α. The application for amendment by Northeast Nuclear Energy Company, et al. (the licensee) dated November 20, 1995, 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;
 - Β. 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
 - Ε. 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, Facility Operating License No. DPR-65 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 207, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance to be implemented within 60 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Phillip F. McKee Deputy Director for Licensing Special Projects Office Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 27, 1997

- 2 -

ATTACHMENT TO LICENSE AMENDMENT NO. 207

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

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

| Remove | Insert |
|----------|----------|
| 3/4 3-51 | 3/4 3-51 |
| 3/4 3-52 | 3/4 3-52 |
| 3/4 3-53 | 3/4 3-53 |

TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

| MILLSTON | INSTRUMENT | | <u>NT</u> | MINIMUM # <u>OPERABLE</u> | ALARM SETPOINT <u>REQUIRED</u> | APPLICABILITY | <u>ACTION</u> |
|-----------------------------|------------|---|---|------------------------------|--------------------------------------|---------------|---------------|
| E - UNIT 2 | 1. | Gross Radioactivity Monitors Providing Automatic Termination of Release | | | | | |
| | | a. | Clean Liquid Radwaste Effluent Line | 1 | Yes | * | 1 |
| | | b. | Aerated Liquid Radwaste Effluent Line | 1 | Yes | * | 1 |
| | | c. | Steam Generator Blowdown Monitor | 1 | Yes | **** | 2 |
| | | d. | Condensate Polishing Facility Waste Neut Sump | 1 | Yes | *** | 1 |
| 3/4 3-51 Amendment No. 194. | 2. | Gross Radioactivity Monitors Not Providing Automatic Termination of Release | | | | | |
| | | a. | Reactor Building Closed Cooling Water Monitor# | 1 | Yes | . * | 3 |
| | 3. | . Flow Rate Measurements | | | | | |
| | | a. | Clean Liquid Radwaste Effluent Line | 1 | No | * | 4 |
| | | b. | Aerated Liquid Radwaste Effluent Line | 1 | No | * | 4 |
| | | c. | Condensate Polishing Facility Waste Neut Sump Discharge Line | 1 | No | * | 4 |
| | | d. | Dilution Water Flow | ## | No | * | NA |
| | | e. | Steam Generator Blowdown Line | ### | No | * | NA |

TABLE 3.3-12 (Continued)

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

Table Notes

- At all times which means that channels shall be OPERABLE and in service on a continuous, uninterrupted basis, except that outages are permitted, for a maximum of 12 hours, for the purpose of maintenance and performance of required tests, checks, calibrations, or sampling.
- ** Deleted.
- *** Modes 1-6 when pathway is being used except that outages are permitted for a maximum of 12 hours for the purpose of maintenance and performance of required tests, checks, calibrations, or sampling.
- **** Modes 1-4, except that outages are permitted for a maximum of 12 hours for the purpose of maintenance and performance of required tests, checks, calibrations, or sampling.
 - # Since the only source of service water contamination is the reactor building closed cooling water, monitoring of the closed cooling water and conservative leakage assumptions will provide adequate control of service water effluents.
 - ## The dilution water is determined by the use of condenser cooling water and service water pump status. Only those pumps actually discharging to the quarry at the time of release are included. Pump status is only reviewed for purposes of determining flows.
- ### Determined by the use of valve curves and/or make up flow rates for the purpose of determining flows only.
- NA Not applicable.

N

TABLE 3.3-12 (Continued)

ACTION STATEMENTS

- ACTION 1: With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirements, effluent releases may continue provided that best efforts are made to repair the instrument and that prior to initiating a release:
 - 1. At least two independent samples are analyzed in accordance with Specification 4.11.1.1; and
 - 2. The original release rate calculations and discharge valving are independently verified by a second individual.
- ACTION 2: With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, either:
 - 1. Suspend all effluent releases via this pathway, or
 - 2. Make best efforts to repair the instrument and obtain grab samples and analyze for gross radioactivity (beta or gamma) at a lower limit of detection of at least 3 x $10^{-7} \mu \text{Ci/ml}$;
 - a. Once per 12 hours when the specific activity of the secondary coolant is > 0.01 μ Ci/gm DOSE EQUIVALENT I-131.
 - b. Once per 24 hours when the specific activity of the secondary coolant is $\leq 0.01 \ \mu$ Ci/gm DOSE EQUIVALENT I-131.
- ACTION 3: With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this Pathway may continue provided that best efforts are made to repair the instrument and that once per 12 hours grab samples of the service water effluent are collected and analyzed for gross radioactivity (beta or gamma) at a lower limit of detection of at least $3 \times 10^{-7} \ \mu \text{Ci/ml}$.
- ACTION 4: With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided that best efforts are made to repair the instrument and that the flow rate is estimated once per 4 hours during actual releases. Pump performance curves may be used to estimate flow.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 207

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 <u>INTRODUCTION</u>

By letter dated November 20, 1995, the Northeast Nuclear Energy Company, et al. (the licensee) submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 2, Technical Specifications (TSs). The changes to TS Table 3.3-12 would provide clarifications to the applicability and action statements of the radioactive liquid effluent monitoring instrumentation.

Specifically, two changes are being proposed for the steam generator (SG) blowdown monitors. The applicability requirement in TS Table 3.3-12 is currently for Modes 1 through 6 which will change to Modes 1 through 4. The proposed change reflects when the SG blowdown system is in service. The second change clarifies TS Table 3.3-12, Action 2, indicating that when the minimum number of instrument channels are not operable and effluent releases via the affected pathway are suspended, no sampling is required.

The third change being proposed is a clarification to the applicability statement in TS Table 3.3-12 for the Condensate Polishing Facility (CPF) Waste Neutralizing Sump radiation monitors indicating that a monitor is only required to be operable when its associated pathway is in use.

2.0 BACKGROUND

An NRC team inspection was conducted in late May and early June 1995 by the Special Inspection Branch of the Office of Nuclear Reactor Regulation, assisted by Region I and II, following an extended outage at the Millstone Nuclear Power Station, Unit No. 2. The inspection report, "NRC Inspection Report 50-336/95-201, Millstone Nuclear Power Station Unit 2, Restart Assessment Team Inspection," dated July 21, 1995, identified seven deficiencies. One of the deficiencies, 95-201-5, was improper TS interpretation of the requirements for the SG blowdown effluent radiation monitors. The proposed TS changes are in response to the inspection report

9709030275 970826 PDR ADUCK 05000336 P PDR finding (95-201-5) to provide clarification to the radioactive liquid effluent monitoring instrumentation TSs which will limit the need for future TS interpretations in this area.

3.0 EVALUATION

-, . .

The purpose of the SG blowdown system is to maintain the SG chemistry within operating limits. It is used on a regular basis during operation in Modes 1 through 4 to control the buildup of sludge and the removal of unwanted contaminants due to SG or condenser tube leaks. In Modes 5 and 6, the SG blowdown system is not used due to the reduced temperatures and pressures in these modes of operation. Chemistry control is maintained by utilizing the SG pumpdown system involving batch discharges. The procedures utilized for the Modes 5 and 6 evolution require that sampling be performed prior to discharging any effluents and the radiation monitoring instrumentation is not required to be operable.

Therefore, on the basis of the information provided, the NRC staff has determined that the proposed change to the TS Table 3.3-12 applicability statement for the SG blowdown monitors from Modes 1 through 6 to Modes 1 through 4 is acceptable. In addition, a proposed clarification of TS Table 3.3-12, Action 2, indicates that when the minimum number of instrument channels are not operable and effluent releases via the affected pathway are suspended, no sampling is required. This clarification is also acceptable since it indicates no sampling is required if there are no releases.

As previously noted, the third proposed change is a clarification to the applicability statement in TS Table 3.3-12 for the CPF waste neutralizing sump radiation monitors. The CPF utilizes ion exchangers for purification and condenser vacuum for deaeration to clean up the condensate before it is used as feedwater for the SGs. The proposed change makes it clear that a monitor is only required to be operable when its associated pathway is in use. Therefore, the NRC staff has determined that the proposed change to TS Table 3.3-12 for the CPF waste neutralizing sump radiation monitors provides needed clarification and is 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. The amendment also relates to changes in record keeping, reporting, or administrative procedures or 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

consideration, and there has been no public comment on such finding (60 FR 65683 dated December 20, 1995). 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 <u>CONCLUSION</u>

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: D. McDonald

Date: August 26, 1997