

March 27, 1995

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

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. M89378)

Dear Mr. Opeka:

The Commission has issued the enclosed Amendment No.186 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2, in response to your application dated April 22, 1994.

The amendment deletes the operability and surveillance requirements of the condenser air ejector radiation monitor from the Millstone Unit 2 Technical Specification Tables 3.3-12 and 4.3-12.

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  
A. DeAgazio for  
Guy S. Vissing, Senior Project Manager Project  
Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 186 to DPR-65  
2. Safety Evaluation

cc w/encls: See next page

Distribution:

Docket File	GVissing	OC/LFDCB
PUBLIC	OGC	LNicholson, RI
PDI-3 Rdg.	GHill (2)	
SVarga	CGrimes, DOPS/OTSB	
JZwolinski	TChandrasekaran	
PMcKee	ACRS (4)	
SNorris	OPA	

DOCUMENT NAME: G:\VISSING\M89378.AMD

OFFICE	LA:PDI-3	PM:PDI-3	OGC	D:PDI-3
NAME	SNorris	GVissing:cn	S.HOM	PMcKee
DATE	03/10/95	03/13/95	03/15/95	03/12/95

OFFICIAL RECORD COPY

030009

9504050274 950327  
PDR ADDCK 05000336  
PDR

DF01  
11



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 27, 1995

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

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. M89378)

Dear Mr. Opeka:

The Commission has issued the enclosed Amendment No. 186 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2, in response to your application dated April 22, 1994.

The amendment deletes the operability and surveillance requirements of the condenser air ejector radiation monitor from the Millstone Unit 2 Technical Specification Tables 3.3-12 and 4.3-12.

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,

A handwritten signature in cursive script, appearing to read "Guy S. Vissing for".

Guy S. Vissing, Senior Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 186 to DPR-65  
2. Safety Evaluation

cc w/encls: See next page

Mr. John F. Opeka  
Northeast Nuclear Energy Company

Millstone Nuclear Power Station  
Unit 2

cc:

Ms. L. M. Cuoco, Senior Nuclear Counsel  
Northeast Utilities Service Company  
Post Office Box 270  
Hartford, Connecticut 06141-0270

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

F. R. Dacimo, Vice President  
Haddam Neck Station  
Connecticut Yankee Atomic Power Company  
362 Injun Hollow Road  
East Hampton, Connecticut 06424-3099

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

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

P. D. Swetland, Resident Inspector  
Millstone Nuclear Power Station  
c/o U.S. Nuclear Regulatory Commission  
Post Office Box 513  
Niantic, Connecticut 06357

Allan Johanson, Assistant Director  
Office of Policy and Management  
Policy Development and Planning Division  
80 Washington Street  
Hartford, Connecticut 06106

Donald B. Miller, Jr.  
Senior Vice President  
Millstone Station  
Northeast Nuclear Energy Company  
Post Office Box 128  
Waterford, Connecticut 06385

S. E. Scace, Vice President  
Nuclear Operations Services  
Northeast Utilities Service Company  
Post Office Box 128  
Waterford, Connecticut 06385

G. H. Bouchard, Nuclear Unit Director  
Millstone Unit No. 2  
Northeast Nuclear Energy Company  
Post Office Box 128  
Waterford, Connecticut 06385

Nicholas S. Reynolds  
Winston & Strawn  
1400 L Street, NW  
Washington, DC 20005-3502

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

R. M. Kacich, Director  
Nuclear Planning, Licensing & Budgeting  
Northeast Utilities Service Company  
Post Office Box 128  
Waterford, Connecticut 06385

J. M. Solymosy, Director  
Nuclear Quality and Assessment Services  
Northeast Utilities Service Company  
Post Office Box 128  
Waterford, Connecticut 06385



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. 186  
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 April 22, 1994, 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. 186, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Phillip F. McKee, Director  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: March 27, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 186

FACILITY 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.

Remove

3/4 3-51  
3/4 3-52  
3/4 3-54  
3/4 3-55

Insert

3/4 3-51  
3/4 3-52  
3/4 3-54  
2/4 3-55

TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM # OPERABLE</u>	<u>ALARM SETPOINT REQUIRED</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
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
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 1-5 and Mode 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.
- # - 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.

TABLE 4.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
<b>1. GROSS RADIOACTIVITY MONITORS PROVIDING ALARM AUTOMATIC TERMINATION OF RELEASE</b>				
a. Clean Liquid Radwaste Effluent Line	D*	P	R(1)	Q(2)
b. Aerated Liquid Radwaste Effluent Line	D*	P	R(1)	Q(2)
c. Steam Generator Blowdown Monitor	D*	M	R(1)	Q(2)
d. Deleted				
e. Condensate Polishing Facility - Waste Neut Sump	D*	P	R(1)	Q(2)
<b>2. GROSS RADIOACTIVITY MONITORS PROVIDING ALARM BUT NOT PROVIDING AUTOMATIC TERMINATION OF RELEASE</b>				
a. Reactor Building Closed Cooling Water	D*	M	R(1)	Q(2)
<b>3. FLOW RATE MEASUREMENT DEVICES</b>				
a. Clean Liquid Radwaste Line	D*	NA	R	Q
b. Aerated Liquid Radwaste Line	D*	NA	R	Q
c. Condensate Polishing Facility - Waste Neut Sump Line	D*	NA	R	Q
d. Dilution Water Flow	D(4)	NA	NA	NA
e. Steam Generator Blowdown Line	D(4)	NA	NA	NA

TABLE 4.3-12  
(Continued)

TABLE NOTATIONS

- \* - During releases via this pathway and when the monitor is required OPERABLE per Table 3.3-12. The CHANNEL CHECK should be done when the discharge is in progress.
- NA - Not Applicable.
- (1) - Calibration shall include the use of a known radioactive liquid or solid source which is traceable to an NBS source.
- (2) - The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following exist:
  - a. Instrument indicates measured levels above the alarm/trip setpoint.
  - b. Instrument indicates a downscale or circuit failure.
    - Automatic isolation of the discharge stream shall also be demonstrated for this case for each monitor except the reactor building closed cooling water monitor.
- (3) - Deleted.
- (4) - Pump or valve status, as appropriate, shall be checked daily for the purposes of determining flow rates.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 186

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 April 22, 1994, the Northeast Nuclear Energy Company (the licensee) submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 2 Technical Specifications (TS). The requested changes would delete the operability and surveillance requirements (SR) of the condenser air ejector (CAE) radiation monitor from the Millstone Unit 2 Technical Specification Tables 3.3-12 and 4.3-12.

2.0 EVALUATION

The CAE monitor and the steam generator (SG) blowdown monitor are gross radioactivity monitors which provide automatic termination of SG blowdown discharge at the trip set points of the monitors. Currently, TS Table 3.3-12 requires the operability of one of these two monitors in operational Modes 1 through 5 and in Mode 6 when the SG blowdown pathway is used. This is because either of these monitors can automatically terminate the SG blowdown discharge. The CAE monitor is included in the current TS Tables 3.3-12 and 4.3-12 because at the time when these tables were formalized, it was believed that the CAE monitor could be an alternative monitor to the SG blowdown monitor for monitoring and isolating the SG blowdown. Specifically, it was then believed that typical causes of increased SG blowdown activity, such as increased primary coolant activity or increased primary to secondary leakage, would translate into corresponding increased activities in the streams monitored by both the CAE and SG blowdown monitors. From its operational experience, the licensee found that this is not necessarily true for all operating conditions, and that SG blowdown stream activity can increase without causing a corresponding increase in the activity in the stream monitored by the CAE monitor. In its April 22, 1994 submittal, the licensee provided two examples to illustrate when this lack of correlation between SG blowdown stream activity and CAE stream activity can occur. As a first

example, the licensee pointed out that a plant trip following an extended period of primary to secondary leakage can cause long lived secondary side activity (e.g., Cs-137) to come out of "hide out" in the SG, resulting in an increase in the SG blowdown activity without a corresponding increase in the activity in the stream monitored by the CAE monitor. As a second example, the licensee pointed out that a reduction in the SG blowdown flow with all other parameters held constant, will cause an increase in the SG blowdown concentration without a corresponding increase in the activity in the stream monitored by the CAE monitor. Accordingly the CAE monitor which would be deleted from the TS is not as accurate as the SG blowdown monitor which is being retained in the TS. For the above reasons, the licensee concluded that the CAE monitor does not adequately monitor or isolate SG blowdown under all operating conditions. Therefore, the licensee proposed deletion of the operability and SR for the CAE monitor identified in the Millstone Unit 2 TS Tables 3.3-12 and 4.3-12. The licensee further proposed deletion of applicable portions of notes (i.e., portions of notes applicable to the CAE monitor) to TS Tables 3.3-12 and 4.3-12 to be consistent with its proposed deletion of the operability and SR for the CAE monitor from the above tables.

The licensee further justified its proposed license amendment to Millstone Unit 2 TS for liquid effluent monitoring instrumentation stating that it is more conservative than the existing TS for liquid effluent monitoring instrumentation, since it imposes stricter limitations on the operation of Millstone Unit 2. The licensee stated that this is because the proposed TS change requires the use of a single radiation monitor, the SG blowdown monitor (instead of either the SG blowdown monitor or the CAE monitor as allowed by the existing TS), to meet the requirements of Millstone Unit 2 TS 3.3.3.9, "Radioactive Liquid Effluent Monitoring Instrumentation." Additionally, the licensee stated that although the operability and SR of the CAE monitor will be deleted from Millstone Unit 2 TS if NRC approves the licensee's requested TS change, the design features, functions and currently specified surveillances and frequencies for such surveillances will not be changed and that the CAE monitor will continue to isolate the SG blowdown upon a high radiation alarm. In a telephone conversation with the staff on July 27, 1994, the licensee clarified that the surveillances and their frequencies for the CAE radiation monitor, identified in the existing Millstone Unit 2 TS Tables 3.3-12 and 4.3-12, will be relocated in plant controlled procedures and documentation.

Based on the discussion above, the staff finds the CAE monitor is not necessary to assure the protection of the public health and safety and the proposed deletion is acceptable. In this context, the staff notes that the deletion of the CAE monitor from the TS tables on liquid effluent monitoring instrumentation for Millstone Unit 2, does not compromise the plant's capability to monitor, prior to release to environs, the gaseous effluent from the CAE. The staff finds that the stack radiation monitor will monitor the above release as well as releases from some other sources (see Millstone Unit 2 TS Tables 3.3-13 and 4.3-13 and FSAR Section 10.4.2).

### 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 and 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 (59 FR 27058). 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. Chandrasekaran

Date: March 27, 1995