

September 9, 1988

Docket No. 50-423

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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 NO. 67366)

The Commission has issued the enclosed Amendment No. 22 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated February 24, 1988.

The amendment changes Technical Specification (TS) 3.3.3.9, "Radioactive Liquid Effluent Monitoring Instrumentation" and TS 3.3.3.10, "Radioactive Gaseous Monitoring Instrumentation." The changes provide for the following: (1) allowance for planned inoperability of monitoring instrumentation for up to 12 hours for the purpose of maintenance and performance of required tests, checks, calibration or sampling, (2) a requirement to initiate auxiliary sampling within 12 hours after inoperability of certain gaseous effluent monitors, and (3) allowance for inoperability of certain liquid effluent monitoring instrumentation, during Mode 6 (refueling), when the effluent pathway is not being used.

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. 22 to NPF-49
2. Safety Evaluation

cc w/enclosures:

See next page

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SNorris  
09/6/88

PM:PDI-4  
DJaffe:pd  
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D:PDI-4  
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Mr. E. J. Mroczka  
Northeast Nuclear Energy Company

Millstone Nuclear Power Station  
Unit No. 3

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

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.\*

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.22  
License No. NPF-49

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 February 24, 1988, 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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\*Northeast Nuclear Energy Company is authorized to act as agent and representative for the following Owners: Central Maine Power Company, Central Vermont Public Service Corporation, Chicopee Municipal Lighting Plant, City of Burlington, Vermont, Connecticut Municipal Electric Light Company, Massachusetts Municipal Wholesale Electric Company, Montaup Electric Company, New England Power Company, The Village of Lyndonville Electric Department, Western Massachusetts Electric Company, and Vermont Electric Generation and Transmission Cooperative, Inc., and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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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. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 22, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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



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: September 9, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 22

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

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 to maintain document completeness.

Remove

3/4 3-69  
3/4 3-70  
3/4 3-77

Insert

3/4 3-69  
3/4 3-70  
3/4 3-77

## INSTRUMENTATION

### RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.3.9 The radioactive liquid effluent monitoring instrumentation channels shown in Table 3.3-12 shall be OPERABLE with their Alarm/Trip Setpoints set to ensure that the limits of Specification 3.11.1.1 are not exceeded. The Alarm/Trip Setpoints of these channels shall be determined in accordance with the methodology and parameters as described in the REMODCM.

APPLICABILITY: As shown in Table 3.3-12

ACTION:

- a. With a radioactive liquid effluent monitoring instrumentation channel Alarm/Trip Setpoint less conservative than required by the above specification, without delay suspend the release of radioactive liquid effluents monitored by the affected channel, or declare the channel inoperable, or change the setpoint so it is acceptably conservative.
- b. With less than the minimum number of radioactive liquid effluent monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3-12. Exert best efforts to restore the inoperable instrumentation to OPERABLE status within 30 days and, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner. Releases need not be terminated after 30 days provided the specified actions are continued.
- c. The provisions of Specifications 3.0.3 and 3.0.4, are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.9 Each radioactive liquid effluent monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and ANALOG CHANNEL OPERATIONAL TEST at the frequencies shown in Table 4.3-8.

TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
1. Radioactivity Monitors Providing Alarm and Automatic Termination of Release			
a. Waste Neutralization Sump Monitor-Condensate Polishing Facility	1	##	31
b. Turbine Building Floor Drains	1	#	32***
c. Liquid Waste Monitor	1	#	31
d. Regenerate Evaporator Monitor-Condensate Polishing Facility	1*	##	32
e. Steam Generator Blowdown Monitor	1	##	32
2. Flow Rate Measurement Devices-No Alarm Setpoint Requirements			
a. Waste Neutralization Sump Effluents	1	#	33
b. Turbine Building Floor Drains	**	#	N.A.
c. Liquid Waste Effluent Line	1	#	33
d. Regenerate Evaporator Effluent Line	1*	#	33
e. Steam Generator Blowdown Effluent Line	1	#	33
f. Dilution Water Flow	**	#	N.A.

\*N.A. if the Condensate Polishing Facility Regenerate Evaporator is not in service.

\*\*Flow will be determined by pump status.

\*\*\*N.A. if the Turbine Building sump is less than MDA.

#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.

##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.

TABLE 3.3-13 (Continued)

TABLE NOTATIONS

\* 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.

\*\*When the gross activity of the regenerated waste is greater than  $1 \times 10^{-4}$  microCuries/ml.

(1) This minimum channel requirement may be met with a portable continuous air monitor (Eberline PING-3 or equivalent).

ACTION STATEMENTS

ACTION 34 - 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 grab samples are taken at least once per 12 hours and these samples are analyzed for radioactivity within 24 hours.

ACTION 35 - 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 samples are continuously collected with auxiliary sampling equipment for periods of seven (7) days and analyzed for principal gamma emitters with half lives greater than 8 days within 48 hours after the end of the sampling period. Auxiliary sampling must be initiated within 12 hours after initiation of this ACTION Statement.

ACTION 36 - 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 at least once per 4 hours.

ACTION 37 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, Millstone Unit 3 releases via the Millstone Unit 1 stack may continue provided that best efforts are made to repair the instrument and that grab samples are taken at least once per 12 hours and analyzed for gross radioactivity within 24 hours.



TABLE 4.3-9

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. Millstone Unit 3 Ventilation Vent Stack (Turbine Building)					
a. Noble Gas Activity Monitor	D	M	R(1)	Q(2)	*
b. Iodine Sampler	W	N.A.	N.A.	N.A.	*
c. Particulate Sampler	W	N.A.	N.A.	N.A.	*
d. Stack Flow Rate Monitor	D	N.A.	R	Q	*
e. Sampler Flow Rate Monitor	D	N.A.	R	Q	*
2. Millstone Unit 1 Main Stack					
a. Noble Gas Activity Monitor	D	M	R(3)	Q(2)	*
b. Iodine Sampler	W	N.A.	N.A.	N.A.	*
c. Particulate Sampler	W	N.A.	N.A.	N.A.	*
d. Stack Flow Rate Monitor	D	N.A.	R	Q	*
e. Sampler Flow Rate Monitor	D	N.A.	R	Q	*



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 22

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

INTRODUCTION

By Application for License Amendment dated February 24, 1988, Northeast Nuclear Energy Company (NNECO) proposed changes to the Millstone Unit 3 Technical Specifications. The proposed amendment would change Technical Specification (TS) 3.3.3.9, "Radioactive Liquid Effluent Monitoring Instrumentation" and TS 3.3.3.10, "Radioactive Gaseous Monitoring Instrumentation." The proposed changes provide for the following: (1) allowance for planned inoperability of monitoring instrumentation for up to 12 hours for the purpose of maintenance and performance of required tests, checks, calibration or sampling, (2) a requirement to initiate auxiliary sampling within 12 hours after inoperability of certain gaseous effluent monitors, and (3) allowance for inoperability of certain liquid effluent monitoring instrumentation, during Mode 6 (refueling), when the effluent pathway is not being used.

DISCUSSION AND EVALUATION

The Limiting Conditions for Operation and Surveillance Requirements for liquid and gaseous monitoring instruments are contained in TS 3.3.3.9 and 3.3.3.10, respectively. These instruments monitor effluents during actual or potential releases of effluents and are not credited for operability in any analyzed accident. In the event that these instruments become inoperable, the TS requires the licensee to exercise "best efforts" to repair the instruments. A reporting requirement is also associated with effluent monitor instrument unavailability. At the present time, gaseous and liquid effluent monitors must be operable at all times with the exception of the Warehouse 5 Vent which must be operable when the gross activity of the regenerated waste is greater than  $1 \times 10^{-4}$  micro Curies/ml.

The licensee has proposed that TS 3.3.3.9 and 3.3.3.10 be modified to allow the gaseous and liquid effluent monitors to be made inoperable for up to, ". . . a maximum of 12 hours for the purpose of maintenance and performance of required tests, checks, calibrations and sampling." These activities are required to assure continued accurate performance of the subject instrumentation. The licensee has estimated that, based upon operating experience, instrument out-of-service time does not exceed 12 hours per calendar quarter which is less than 1% unavailability. The licensee has also proposed that certain secondary-coolant-side liquid effluent monitors that do not represent a likely discharge

path during refueling not be required to be operable during refueling (Mode 6) when the path is not being used. The following instruments would not be required to be operable in Mode 6 when the path is not being used: (1) Waste Neutralization Sump-Condensate Polishing Facility, (2) Regenerate Evaporator Monitor-Condensate Polishing Facility, and (3) Steam Generator Blowdown Monitor.

The licensee has proposed an additional change to TS 3.3.3.10 which presently requires that sampling of radioactive gaseous effluent pathways be undertaken if the minimum specified number of the associated monitoring channels become inoperable. No time limit to begin monitoring is presently incorporated in the TS. The licensee has proposed that such monitoring begin within 12 hours of time that the monitoring channels are determined to be inoperable.

Since the subject effluent monitors were not credited in the safety analysis, the proposed changes to the TS will not effect the safe operation of the facility. Moreover, the slight increase in unavailability permitted by the proposed TS will not effect the routine monitoring of plant effluents. Accordingly, the proposed changes to TS 3.3.3.9 and 3.3.3.10 are 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. 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: September 9, 1988

Principal Contributor:

D. H. Jaffe