

August 24, 1987

DUR  
016

Docket No. 50-423

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

Dear Mr. Mroczka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC# 65328)

The Commission has issued the enclosed Amendment No. 10 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated May 5, 1987.

The amendment revises Technical Specification Sections 4.8.1.1.2 and 3.3.2 (Table 3.3-5, item 11.a) to increase the emergency diesel generator startup time from 10 seconds to 11 seconds and to increase the 4 KV Bus undervoltage response time from 12 seconds to 13 seconds.

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,

/S/

Robert L. Ferguson, Project Manager  
Project Directorate I-4  
Division of Reactor Projects I/II

Enclosures:

- 1. Amendment No. 10 to NPF-49.
- 2. Safety Evaluation

cc w/enclosures:  
See next page

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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. 10  
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 May 5, 1987, 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.

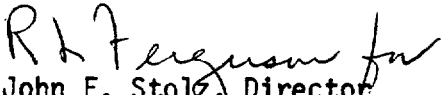
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 10, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

  
John F. Stolz, Director  
Project Directorate I-4  
Division of Reactor Projects I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 24, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 10

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 8-3  
3/4 8-5  
3/4 8-7  
3/4 3-34

Insert

3/4 8-3  
3/4 8-5  
3/4 8-7  
3/4 3-34

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- a. In accordance with the frequency specified in Table 4.8-1 on a STAGGERED TEST BASIS by:\*
- 1) Verifying the fuel level in the day tank,
  - 2) Verifying the fuel level in the fuel storage tank,
  - 3) Verifying the fuel transfer pump starts and transfers fuel from the storage system to the day tank,
  - 4) Verifying the lubricating oil inventory in storage,
  - 5) Verifying the diesel starts from ambient condition and accelerates to at least 508 rpm in less than or equal to 11 seconds. The generator voltage and frequency shall be  $4160 \pm 420$  volts and  $60 \pm 0.8$  Hz within 11 seconds after the start signal. The diesel generator shall be started for this test by using one of the following signals:
    - a) Manual, or
    - b) Simulated loss-of-offsite power by itself, or
    - c) Simulated loss-of-offsite power in conjunction with an ESF Actuation test signal, or
    - d) An ESF Actuation test signal by itself.
  - 6) Verifying the generator is synchronized, loaded to greater than or equal to 4986 kW in less than or equal to 60 seconds, and operates with a load greater than or equal to 4986 kW for at least 60 minutes, and
  - 7) Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the day tank;
- c. At least once per 31 days by checking for and removing accumulated water from the fuel oil storage tanks;
- d. By sampling new fuel oil in accordance with ASTM-D4057 prior to addition to storage tanks and:
- 1) By verifying in accordance with the tests specified in ASTM-D975-81 prior to addition to the storage tanks that the sample has:

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\*All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures (e.g., gradual acceleration and/or gradual loading >60 sec) as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- a) An API Gravity of within 0.3 degrees at 60°F, or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate, or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89, or an API gravity of greater than or equal to 27 degrees but less than or equal to 39 degrees;
  - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes (alternatively, Saybolt viscosity, SUS at 100°F of greater than or equal to 32.6, but not less than or equal to 40.1), if gravity was not determined by comparison with the supplier's certification;
  - c) A flash point equal to or greater than 125°F; and
  - d) A clear and bright appearance with proper color when tested in accordance with ASTM-D4176-82.
- 2) By verifying within 30 days of obtaining the sample that the other properties specified in Table 1 of ASTM-D975-81 are met when tested in accordance with ASTM-D975-81 except that the analysis for sulfur may be performed in accordance with ASTM-D1552-79 or ASTM-D2622-82.
- e. At least once every 31 days by obtaining a sample of fuel oil in accordance with ASTM-D2276-78, and verifying that total particulate contamination is less than 10 mg/liter when checked in accordance with ASTM-D2276-78, Method A;
  - f. At least once per 18 months, during shutdown, by:
    - 1) Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service;\*
    - 2) Verifying the generator capability to reject a load of greater than or equal to 595 kW while maintaining voltage at  $4160 \pm 420$  volts and frequency at  $60 \pm 3$  Hz;
    - 3) Verifying the generator capability to reject a load of 4986 kW without tripping. The generator voltage shall not exceed 4784 volts during and following the load rejection;
    - 4) Simulating a loss-of-offsite power by itself, and:
      - a) Verifying deenergization of the emergency busses and load shedding from the emergency busses, and

\*The provisions of Specification 4.0.6 are applicable.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 11 seconds, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 0.8$  Hz during this test.
- 5) Verifying that on an ESF Actuation test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be  $4160 \pm 420$  volts and  $60 \pm 0.8$  Hz within 11 seconds after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test;
  - 6) Simulating a loss-of-offsite power in conjunction with an ESF Actuation test signal, and:
    - a) Verifying deenergization of the emergency busses and load shedding from the emergency busses;
    - b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 11 seconds, energizes the auto-connected emergency (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 0.8$  Hz during this test; and
    - c) Verifying that all automatic diesel generator trips, except engine overspeed, lube oil pressure low (2 of 3 logic) and generator differential, are automatically bypassed upon loss of voltage on the emergency bus concurrent with a Safety Injection Actuation signal.
  - 7) Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 5485 kW and during the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 4986 kW. The generator voltage and frequency shall be  $4160 \pm 420$  volts and  $60 \pm 0.8$  Hz within 11 seconds after the start signal; the steady-state



## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24-hour test, perform Specification 4.8.1.1.2f.6)b);\*
- 8) Verifying that the auto-connected loads to each diesel generator do not exceed the 2000-hour rating of 5335 kW;
  - 9) Verifying the diesel generator's capability to:
    - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
    - b) Transfer its loads to the offsite power source, and
    - c) Be restored to its standby status.
  - 10) Verifying that with the diesel generator operating in a test mode, connected to its bus, a simulated Safety Injection signal overrides the test mode by: (1) returning the diesel generator to standby operation, and (2) automatically energizing the emergency loads with offsite power;
  - 11) Verifying that the fuel transfer pump transfers fuel from each fuel storage tank to the day tank of each diesel via the installed cross-connection lines;
  - 12) Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within  $\pm 10\%$  of its design interval; and
  - 13) Verifying that the following diesel generator lockout features prevent diesel generator starting:
    - a) Engine overspeed,
    - b) Lube oil pressure low (2 of 3 logic),
    - c) Generator differential, and
    - d) Emergency stop.

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\*If Specification 4.8.1.1.2f.6)b) is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at 4986 kW for 1 hour or until operating temperature has stabilized.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- g. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting both diesel generators simultaneously, during shutdown, and verifying that both diesel generators accelerate to at least 508 rpm in less than or equal to 11 seconds; and
- h. At least once per 10 years by:
  - 1) Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution, and
  - 2) Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code at a test pressure equal to 110% of the system design pressure.

4.8.1.1.3 Reports - All diesel generator failures, valid or nonvalid, shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 30 days. Reports of diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests (on a per nuclear unit basis) is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

TABLE 4.8-1

DIESEL GENERATOR TEST SCHEDULE

<u>NUMBER OF FAILURES IN LAST 100 VALID TESTS*</u>	<u>TEST FREQUENCY</u>
≤1	At least once per 31 days
2	At least once per 14 days
3	At least once per 7 days
≥4	At least once per 3 days

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\*Criteria for determining number of failures and number of valid tests shall be in accordance with Regulatory Position C.2.e of Regulatory Guide 1.108, Revision 1, August 1977, where the last 100 tests are determined on a per nuclear unit basis. For the purposes of this schedule, only valid tests conducted after the completion of the preoperational test requirements of Regulatory Guide 1.108, Revision 1, August, 1977, shall be included in the computation of the "Last 100 Valid Tests."

TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

<u>INITIATING SIGNAL AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
4. Steam Line Pressure--Low	
a. Safety Injection (ECCS)	$\leq 27^{(5)}/37^{(4)}$
1) Reactor Trip	$\leq 2$
2) Feedwater Isolation	$\leq 6.8^{(3)}$
3) Phase "A" Isolation	$\leq 2^{(2)(6)}/12^{(1)(6)}$
4) Auxiliary Feedwater	$\leq 60$
5) Service Water	$\leq 90^{(1)}$
6) Start Diesel Generators	$\leq 12$
b. Steam Line Isolation	$\leq 6.8^{(3)}$
5. Containment Pressure--High-3	
a. Quench Spray	$\leq 32^{(2)}/42^{(1)}$
b. Phase "B" Isolation	$\leq 2^{(2)(6)}/12^{(1)(6)}$
c. Motor-Driven Auxiliary Feedwater Pumps	$\leq 60$
d. Service Water	$\leq 90^{(1)}$
6. Containment Pressure--High-2	
a. Steam Line Isolation	$\leq 6.8^{(3)}$
7. Steam Line Pressure - Negative Rate--High	
a. Steam Line Isolation	$\leq 6.8^{(3)}$
8. Steam Generator Water Level--High-High	
a. Turbine Trip	$\leq 2.5$
b. Feedwater Isolation	$\leq 6.8^{(3)}$
9. Steam Generator Water Level--Low-Low	
a. Motor-Driven Auxiliary Feedwater Pumps	$\leq 60$
b. Turbine-Driven Auxiliary Feedwater Pump	$\leq 60$
10. Loss-of-Offsite Power	
a. Motor-Driven Auxiliary Feedwater Pump	$\leq 60$

TABLE 3.3-5 (Continued)  
ENGINEERED SAFETY FEATURES RESPONSE TIMES

<u>INITIATING SIGNAL AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
11. Loss of Power	
a. 4 kV Bus Undervoltage (Loss of Voltage)	$\leq 13$
b. 4 kV Emergency Bus Undervoltage (Grid Degraded Voltage)	$\leq 18^{(7)}/310^{(8)}$
12. T <sub>ave</sub> Low Coincident With Reactor Trip (P-4)	
a. Feedwater Isolation	$\leq 6.8^{(3)}$
13. Control Building Inlet Ventilation Radiation	
a. Control Building Isolation	$\leq 3.7$
14. Outside Chlorine High	
a. Control Building Isolation	$\leq 7$



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 10  
TO FACILITY OPERATING LICENSE NO. NPF-49  
NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.  
MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3  
DOCKET NO. 50-423

1.0 INTRODUCTION

The existing Technical Specification 4.8.1.1.2 requires the diesel generator to attain voltage and frequency within 10 seconds and the loss of voltage recovery time in Table 3.3-5 to be less than or equal to 12 seconds. By letter dated May 5, 1987, Northeast Utilities requested a revision to the Millstone 3 Technical Specifications for the diesel generator start time from 10 to 11 seconds and loss of voltage recovery time from 12 to 13 seconds.

2.0 EVALUATION

Northeast Utilities has proposed a change to the Millstone 3 Technical Specifications surveillance requirement 4.8.1.1.2. The licensee states that the emergency diesel generators are currently starting in approximately 9.5 seconds, leaving a very small margin for meeting the Technical Specification limit of 10 seconds. This has resulted in declared diesel generator failures (10.1 second starting time) on two occasions. The licensee has requested that the diesel generator start up time should be increased from 10 seconds to 11 seconds. The licensee plans to maintain the current ESF response time requirements in Table 3.3-5 except Item 11.a for a loss of voltage event without a safety injection signal. In this case, the 12 second requirement will be increased to 13 seconds. The licensee has performed the analyses to show that the proposed changes do not represent an unreviewed safety question. In the previous analysis, the licensee had assumed 2 seconds for the signal generator to the start circuitry of the diesel generator and additional 10 seconds for the diesel generator to come up to the rated voltage and speed. The licensee has found that a margin of 1 second existed in the response time of signal generator due to the fast acting relays. The response time of the signal generator can be reduced from 2 seconds to 1 second which would compensate for the increase in start up time of the diesel generator. The relaxation of the diesel generator start-up time does not create the possibility of an accident or malfunction or a different type than any evaluated previously in the safety analysis report. We find this to be acceptable.

The staff has reviewed the proposed Technical Specification changes which reflect the increase in the diesel generator start-up time of 10 seconds to 11 seconds and loss of voltage recovery time from 12 seconds to 13 seconds and has concluded that they do not represent an unreviewed safety question and the changes are, therefore, acceptable.

### 3.0 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.

### 4.0 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: August 24, 1987

Principal Contributors:

R. Ferguson

N. Trehan



August 21, 1987

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016

Docket No. 50-423

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

Dear Mr. Mroczka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC #64401)

The Commission has issued the enclosed Amendment No. 9 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated December 18, 1986.

This amendment revises the Technical Specification Section 3.3.3.1 to delete the control building inlet ventilation signal from Tables 3.3-6, 4.3.3 and corresponding action statement no. 27. These requirements are deleted because they duplicate requirements in Technical Specification Sections 3.3.2 (functional unit 7e of Tables 3.3-3 and 4.3-2).

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,

/s/

Robert L. Ferguson, Project Manager  
Project Directorate I-4  
Division of Reactor Projects I/II

Enclosures:

1. Amendment No. 9 to NPF-49.
2. Safety Evaluation

cc w/enclosures:  
See next page

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8/13/87

PDI-4  
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8/13/87

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8/17/87  
*[Signature]*

Mr. E. J. Mrocza  
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. <sup>9</sup>  
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 December 18, 1986, 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.

---

\*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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PDR ADCK 05000423  
PDR

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. 9, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director  
Project Directorate I-4  
Division of Reactor Projects I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 21, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 9

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 3-43  
3/4 3-44  
3/4 3-45

Insert

3/4 3-43  
3/4 3-44  
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TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION FOR PLANT OPERATIONS

<u>FUNCTIONAL UNIT</u>	<u>CHANNELS TO TRIP/ALARM</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>ACTION</u>
1. Containment					
a. Containment Area Purge and Exhaust Isolation	1	2	All	≤ 1 R/h	26
b. RCS Leakage Detection					
1) Particulate Radioactivity	N.A.	1	1, 2, 3, 4	N.A.	29
2) Gaseous Radioactivity	N.A.	1	1, 2, 3, 4	N.A.	29
2. Fuel Storage Pool Areas					
a. Criticality-Radiation Level	1	2	*	≤ 15 mR/h	28

TABLE 3.3-6 (Continued)

TABLE NOTATIONS

\* With fuel in the fuel storage pool areas.

ACTION STATEMENTS

- ACTION 26 - With less than the Minimum Channels OPERABLE requirement, operation may continue provided the containment purge and exhaust valves are maintained closed.
- ACTION 27 - Not used.
- ACTION 28 - With less than the Minimum Channels OPERABLE requirement, operation may continue for up to 30 days provided an appropriate portable continuous monitor with the same Alarm Setpoint is provided in the fuel storage pool area. Restore the inoperable monitors to OPERABLE status within 30 days or suspend all operations involving fuel movement in the fuel storage pool areas.
- ACTION 29 - With the number of OPERABLE Channels less than the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION FOR PLANT  
OPERATIONS SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. Containment				
a. Containment Area Purge and Exhaust Isolation	S	R	M	A11
b. RCS Leakage Detection				
1) Particulate Radio- activity	S	R	M	1, 2, 3, 4
2) Gaseous Radioactivity	S	R	M	1, 2, 3, 4
2. Fuel Storage Pool Areas				
a. Criticality-Radiation Level	S	R	M	*

TABLE NOTATIONS

\* With fuel in the fuel storage pool area.



## INSTRUMENTATION

### MOVABLE INCORE DETECTORS

#### LIMITING CONDITION FOR OPERATION

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3.3.3.2 The Movable Incore Detection System shall be OPERABLE with:

- a. At least 75% of the detector thimbles,
- b. A minimum of two detector thimbles per core quadrant, and
- c. Sufficient movable detectors, drive, and readout equipment to map these thimbles.

APPLICABILITY: When the Movable Incore Detection System is used for:

- a. Recalibration of the Excore Neutron Flux Detection System, or
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of  $F_{\Delta H}^N$ ,  $F_Q(Z)$  and  $F_{xy}$ .

#### ACTION:

With the Movable Incore Detection System inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.2 The Movable Incore Detection System shall be demonstrated OPERABLE at least once per 24 hours by normalizing each detector output when required for:

- a. Recalibration of the Excore Neutron Flux Detection System, or
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of  $F_{\Delta H}^N$ ,  $F_Q(Z)$  and  $F_{xy}$ .



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 9

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

1.0 INTRODUCTION

By letter dated December 18, 1986, Northeast Nuclear Energy Company proposed changes to the Millstone Unit 3 Technical Specifications to eliminate redundancy of operational and surveillance requirements on the control room air intake radioactivity monitor. The changes will delete reference to the control room air intake radiation monitor in Technical Specification Table 3.3-6, Radioactive Monitoring Instrumentation for Plant Operations, and the associated Surveillance Table 4.3-3. The reason for this deletion is that all operational, testing and surveillance requirements are duplicated for this monitor in ESF Instrumentation Tables 3.3-3, 3.3-4 and 4.3-2.

2.0 EVALUATION

The control building inlet ventilation radiation monitor is listed as both Engineered Safety Feature Actuation System Instrumentation (Item 7e, Tables 3.3-3, 3.3-4 and 4.3-2) and Radioactive Monitoring Instrumentation for Plant Operations (Item 3a Tables 3.3-6 and 4.3-3).

The control building inlet ventilation radiation monitor is more logically associated with the Engineered Safety Feature Actuation Instrumentation because it initiates a control building isolation signal. The proposed change retains the operational testing and surveillance requirements for this monitor and eliminates unnecessary duplication in the Technical Specifications. We find these changes acceptable.

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### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes which are administrative in nature. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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.

### 4.0 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: August 21, 1987

Principal Contributors:

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