

October 29, 1990

Docket No. 50-336

Mr. Edward J. Mroczka  
Senior Vice President  
Nuclear Engineering and Operations  
Connecticut Yankee Atomic Power Company  
Northeast Nuclear Energy Company  
P. O. Box 270  
Hartford, Connecticut 06141-0270

Dear Mr. Mroczka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 77150)

The Commission has issued the enclosed Amendment No.149 to Facility Operating License No. DPR-65 for Millstone Nuclear Power Station, Unit No. 2, in response to your application dated July 13, 1990.

The amendment changes the Technical Specifications related to the Control Room Emergency Ventilation System (CREVS). Specifically, the change considers an emergency ventilation system to be operable during the shutdown and refueling Modes 5 and 6 with only a normal or an emergency power source operable for the system.

Minor modifications to your requested changes were made, with the concurrence of your staff, to provide clarity to assure that in the event of one CREVS being declared inoperable, the other operable CREVS would have an operable normal and emergency power system available.

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

Sincerely,

original signed by

Guy S. Vissing, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 149 to DPR-65
- 2. Safety Evaluation

cc w/enclosures:  
See next page

\* See previous concurrence

OFC	:LA:PDI-4	:PM: <del>PDI-4</del>	:PDI-4:D	:SPLB	:PB:SELB	:OGC
NAME	:SNorris*	:GVissing:lm	:JSto	:CMcCracken*	:F. Rosa*	:RBachmann*
DATE	:9/10/90	:10/29/90	:10/29/90	:10/26/90	:10/26/90	:9/19/90

OFC	:QTSB
NAME	:JCalvo*
DATE	:10/26/90

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

October 29, 1990

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Sincerely,

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

Guy S. Vissing, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.149 to DPR-65
2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. Edward J. Mrocza  
Northeast Nuclear Energy Company

Millstone Nuclear Power Station  
Unit No. 2

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

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. 149  
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 July 13, 1990, 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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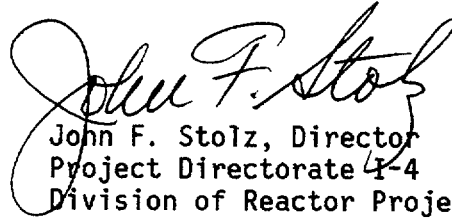
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 149, 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



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 29, 1990

ATTACHMENT TO LICENSE AMENDMENT NO.149

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 7-16  
3/4 7-17  
3/4 7-18

Insert

3/4 7-16  
3/4 7-17  
3/4 7-18

## PLANT SYSTEMS

### 3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.6.1 Two independent control room emergency ventilation systems shall be OPERABLE.

APPLICABILITY: ALL MODES

ACTION:

Modes 1, 2, 3, and 4:

With one Control Room Emergency Air Clean-up System inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6\*:

- a. With one Control Room Emergency Air Clean-Up System inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the remaining OPERABLE Control Room Emergency Air Clean-Up System in the recirculation mode.
- b. With both Control Room Emergency Air Clean-Up Systems inoperable, or with the OPERABLE Control Room Emergency Air Clean-Up System required to be in the recirculation mode by ACTION (a.) not capable of being powered by an OPERABLE normal and emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

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\* In Modes 5 and 6, when a Control Room Emergency Air Clean-up system is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of 3.7.6.1 Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of the specification. Unless both conditions (1) and (2) are satisfied within 2 hours, then Limiting Condition for Operation (LCO) 3.7.6.1.a or 3.7.6.1.b shall be invoked as applicable.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

4.7.6.1 Each control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is  $\leq 100^{\circ}\text{F}$ .
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating from the control room, flow through the HEPA filters and charcoal absorber train and verifying that the system operates for at least 15 minutes.
- c. 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:
  1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 2500 cfm  $\pm 10\%$ .
  2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978. The carbon sample shall have a removal efficiency of  $\geq 95$  percent.
  3. Verifying a system flow rate of 2500 cfm  $\pm 10\%$  during system operation when tested in accordance with ANSI N510-1975.
- d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- e. At least once per 18 months by:
  1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of 2500 cfm  $\pm 10\%$ .
  2. Verifying that on a recirculation signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.



## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENT (Continued)

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3. Verifying that control room air in-leakage is less than 100 SCFM with the Control Air Conditioning System operating in the recirculation/filtration mode.
- f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 2500 cfm  $\pm$  10%.
- g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 2500 cfm  $\pm$  10%.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 149

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 application for license amendment dated July 13, 1990, Northeast Nuclear Energy Company (the licensee) requested changes to the Technical Specifications (TS) for Millstone Nuclear Power Station, Unit 2. The proposed change would revise Technical Specification 3.7.6.1, LIMITING CONDITIONS FOR OPERATION for the CONTROL ROOM VENTILATION SYSTEMS by adding an asterisk to the Modes 5 and 6 section that would consider an emergency ventilation system OPERABLE provided (1) its corresponding normal or emergency power source is OPERABLE and (2) all of its redundant system(s), subsystem(s), train(s), component(s), and device(s) are OPERABLE or likewise satisfy the requirements of the specification. Unless both conditions (1) and (2) are satisfied within 2 hours, then LCO 3.7.6.1.a or 3.7.6.1.b would be invoked as applicable. Minor modifications were proposed by the staff with the licensee's verbal concurrence to provide clarity to assure that in the event one CREVS would be inoperable, the other operable CREVS would have an operable normal and emergency power system available.

EVALUATION

The current TS for the Control Room Emergency Ventilation Systems (CREVS), requires, while the reactor is in cold shutdown or refueling, the operating CREVS to be placed in the recirculating mode if the redundant CREVS is inoperable for more than 7 days. A CREVS is considered OPERABLE by TS 1.6 when all instrumentation, controls, normal and emergency power sources, cooling, or seal water, lubrication, or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are capable of performing their related support function(s). The proposed change would allow operation of an OPERABLE CREVS in the normal mode indefinitely only during cold shutdown or refueling if the other CREVS was considered

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inoperable solely because its emergency or normal power source would be inoperable. If the other CREVS was considered inoperable for any other reason during cold shutdown or refueling for more than 7 days, TS 3.7.6.1.a would require the operating CREVS to be in the recirculating mode.

We have reviewed the licensee's proposed change and with minor modifications have determined that they are acceptable. The proposed change would eliminate the requirement for operation of the CREVS in the recirculation mode only during cold shutdown and refueling when one normal or emergency power source has been inoperable for more than 7 days. If one CREVS would be inoperable, the other CREVS, in its recirculation mode, would be considered operable only if it is capable of being powered by a normal and emergency power source. This change makes this requirement consistent with other operability requirements for equipment in cold shutdown and refueling for which only one train is required to be operable.

The proposed technical specification requires the licensee to verify that a normal or emergency power source is available for each train. In addition, all other equipment in each train must be operable. In the event one train would be declared inoperable for any reason, the other redundant train would be placed in the recirculation mode of operation. This train would be required to have a normal and emergency power source capable of providing power. In the event the latter condition is not met and both trains are declared inoperable, suspension of all operations involving core alterations or positive reactivity change would be required.

The staff, with the concurrence of the licensee, has provided clarifications to the proposed TS to preclude possible misinterpretation. The changes did not alter the proposed action or affect the initial no significant hazards determination noticed in the Federal Register on August 22, 1990 (55 FR 34375).

#### ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have 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 staff 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 (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.

Dated: October 29, 1990

Principal Contributor: G. Vissing

DATED: October 29, 1990

AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. DPR-65

DISTRIBUTION

Docket File

NRC & Local PDR

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