

*Docket file*



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

July 12, 1993

Docket No. 50-423

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

Dear Mr. Opeka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. M77362 and 77432)

The Commission has issued the enclosed Amendment No. 80 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated March 19, 1993.

Your March 19, 1993, application was in response to Generic Letter (GL) 90-06, dated June 25, 1990. GL 90-06 contained the staff resolutions of Generic Issue (GI) 70 and GI-94. GI-70 is titled "Power-Operated Relief Valve and Block Valve Reliability," and GI-94 is titled "Additional Low-Temperature Overprotection for Light Water Reactors." The GL requested that licensees adopt the staff positions and appropriate technical specifications for their facilities.

By letters dated October 28, 1992 and March 19, 1993, you responded to GL 90-06 and:

- (1) you submitted technical specifications similar to those described in Enclosure B to the GL, dealing with GI-94;
- (2) you submitted alternative technical specifications to those suggested in Enclosure A to the GL, dealing with GI-70; and
- (3) you indicated that staff positions 1 and 2 of Section 3.1 of Enclosure A to the GL, related to GI-70, will be implemented. These positions pertain to a quality assurance program and an inservice testing program to enhance power operated relief valve (PORV) and block valve reliability. We have found your commitment to adopt staff positions 1 and 2 acceptable. You are requested to inform the staff in writing when these staff positions have been implemented.

This amendment addresses the technical specifications proposed to deal with GI-94. Your technical specifications proposal dealing with GI-70 will be addressed in a separate correspondence.

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The amendment revises the technical specifications to change the allowed out of service time for a single low temperature overpressure protection channel from 7 days to 24 hours when in operating Modes 4, 5, and 6. The staff has reviewed this proposed change and finds it acceptable. This closes out GI-94, and completes the staff's activities on TAC No. M77432.

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:

Vernon L. Rooney, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 80 to NPF-49
- 2. Safety Evaluation

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Mr. John F. Opeka

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July 12, 1993

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Office of Nuclear Reactor Regulation

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NAME	SNorris	VRooney:ch	DPickett	JStolz	OPW
DATE	6/24/93	6/24/93	6/24/93	6/24/93	6/28/93

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Mr. John F. Opeka

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July 12, 1993

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Project Directorate I-4  
Division of Reactor Projects - I/II  
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Enclosures:

1. Amendment No. 80 to NPF-49
2. Safety Evaluation

cc w/enclosures:  
See next page

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

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 80  
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 March 19, 1993, 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. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 80 , 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: July 12, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 80

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.

Remove

3/4-4-38

3/4-4-39

Insert

3/4-4-38

3/4-4-39

REACTOR COOLANT SYSTEM

OVERPRESSURE PROTECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

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3.4.9.3 An Overpressure Protection System shall be OPERABLE with either a or b below:

- a. Two relief valves, as follows:
  1. Two power-operated relief valves (PORVs) with lift settings which do not exceed the limit established in Figure 3.4-4a or Figure 3.4-4b, as appropriate, or
  2. Two residual heat removal (RHR) suction relief valves each with a setpoint of 450 psig, or
  3. One PORV with lift settings within the limits specified in Figure 3.4-4a or Figure 3.4-4b, as appropriate and one RHR suction relief valve with a setpoint of 450 psig.
- b. The Reactor Coolant System (RCS) depressurized with an RCS vent of greater than or equal to 5.4 square inches.

APPLICABILITY: MODE 3 when the temperature of any RCS cold leg is less than or equal to 350°F and MODE 4; MODE 5, and MODE 6 when the head is on the reactor vessel.

ACTION:

- a. With one of two required relief valves inoperable in MODE 3 or 4, restore two relief valves to OPERABLE status within 7 days or depressurize and vent the RCS through at least a 5.4 square inch vent within the next 8 hours.
- b. With one of two required relief valves inoperable in MODE 5 OR 6, either (1) restore two relief valves to OPERABLE status within 24 hours, or (2) complete depressurization and venting of the RCS through at least a 5.4 square inch vent within a total of 32 hours.
- c. With both of the required relief valves inoperable, complete depressurization and venting the RCS through at least a 5.4 square inch vent within 8 hours.
- d. With the RCS vented per ACTIONS a, b or c, verify the vent pathway at least once per 31 days when the pathway is provided by a valve(s), that is locked, sealed or otherwise secured in the open position; otherwise, verify the vent pathway every 12 hours.

REACTOR COOLANT SYSTEM

OVERPRESSURE PROTECTION SYSTEM

LIMITING CONDITION FOR OPERATION

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ACTION (Continued)

- e. In the event the PORVs, the RHR suction relief valves, or the RCS vent(s) are used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the PORVs, the RHR suction relief valves, or RCS vent(s) on the transient, and any corrective action necessary to prevent recurrence.
- f. Entry into an OPERATIONAL MODE is permitted while subject to these ACTION requirements.

SURVEILLANCE REQUIREMENTS

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4.4.9.3.1 Each PORV shall be demonstrated OPERABLE by:

- a. Performance of an ANALOG CHANNEL OPERATIONAL TEST on the PORV actuation channel, but excluding valve operation, within 31 days prior to entering a condition in which the PORV is required OPERABLE and at least once per 31 days thereafter when the PORV is required OPERABLE;
- b. Performance of a CHANNEL CALIBRATION on the PORV actuation channel at least once per 18 months; and
- c. Verifying the PORV isolation valve is open at least once per 72 hours when the PORV is being used for overpressure protection.

4.4.9.3.2 Each RHR suction relief valve shall be demonstrated OPERABLE when the RHR suction relief valves are being used for cold overpressure protection as follows:

- a. For RHR suction relief valve 3RHS\*RV8708A, by verifying at least once per 12 hours that 3RHS\*MV8701A and 3RHS\*MV8701C are open;
- b. For RHR suction relief valve 3RHS\*RV8708B, by verifying at least once per 12 hours that 3RHS\*MV8702B and 3RHS\*MV8702C are open; and
- c. Testing pursuant to Specification 4.0.5.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 80

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 March 19, 1993, the Northeast Nuclear Energy Company (the licensee), submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 3 Technical Specifications (TS). The requested changes would change the allowed out of service time for a single low temperature overpressure protection channel from 7 days to 24 hours when in operating Modes 4, 5, and 6.

2.0 EVALUATION

On June 25, 1990, the staff issued Generic Letter 90-06, "Resolution of Generic Issue 70, 'Power-Operated Relief Valve and Block Valve Reliability,' and Generic Issue 94, 'Additional Low-Temperature Overpressure Protection for Light-Water Reactors,' Pursuant to 10 CFR 50.54(f)." The generic letter represented the technical resolution of the above mentioned generic issues.

Generic Issue (GI) 70, "Power-Operated Relief Valve and Block Valve Reliability," involves the evaluation of the reliability of power-operated relief valves (PORVs) and block valves and their safety significance in pressurized water reactor (PWR) plants. The generic letter discussed how PORVs are increasingly being relied on to perform safety-related functions and the corresponding need to improve the reliability of both PORVs and their associated block valves. Proposed staff positions and improvements to the plant's technical specifications were recommended to be implemented at all affected facilities. This issue is applicable to all Westinghouse, Babcock & Wilcox, and Combustion Engineering designed facilities with PORVs.

Generic Issue 94, "Additional Low-Temperature Overpressure Protection for Light-Water Reactors," addresses concerns with the implementation of the requirements set forth in the resolution of Unresolved Safety Issue (USI) A-26, "Reactor Vessel Pressure Transient Protection (Overpressure Protection)." The generic letter discussed the continuing occurrence of overpressure events and the need to further restrict the allowed outage time for a low-temperature overpressure protection channel in operating Modes 4, 5, and 6. This issue is only applicable to Westinghouse and Combustion Engineering facilities.

By letter dated March 19, 1993, the Northeast Nuclear Energy Company proposed changes to the Millstone 3 technical specifications in response to Generic Letter 90-06. The licensee did not adopt the staff position for GI 70. Rather, they proposed an alternative to the staff suggested technical specifications. The staff has not yet reached a conclusion as to the acceptability of the licensee's position on GI 70. The proposed technical specifications addressing GI 70 will be dealt with at a later time. The licensee also proposed changes describing the reactor coolant system vent paths, which the staff has not yet reviewed. This evaluation will address only the changes related to GI 94.

The actions proposed by the NRC staff to improve the availability of the low-temperature overpressure protection (LTOP) system represents a substantial increase in the overall protection of the public health and safety and a determination has been made that the attendant costs are justified in view of this increased protection. The technical findings and the regulatory analysis related to Generic Issue 94 are discussed in NUREG-1326, "Regulatory Analysis for the Resolution of Generic Issue 94, Additional Low-Temperature Overpressure Protection for Light-Water Reactors."

The proposed changes to the Millstone 3 technical specifications in the licensee's letter of March 19, 1993, are consistent with that proposed in the staff's generic letter. The proposed modifications to the technical specifications involves plant operation in Modes 4, 5 or 6 with an inoperable LTOP channel. The licensee has adopted the staff position in that operations under such conditions be limited to 24 hours before restoring the LTOP channel to operable status.

The staff has reviewed the licensee's proposed modifications to the Millstone 3 technical specifications. Since the proposed modifications are consistent with the staff's position previously stated in the generic letter and justified in the above mentioned regulatory analysis, the staff finds the proposed modifications to be acceptable.

### 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 (58 FR 32388). 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 Contributors: Edward Throm  
Douglas Pickett  
Vernon Rooney

Date: July 12, 1993