

November 15, 1990

Docket No. 50-423

DISTRIBUTION

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Dear Mr. Mroczka:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 77224)

The Commission has issued the enclosed Amendment No. 58 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated July 31, 1990.

The amendment changes Millstone Unit 3 Technical Specification (TS) 3.7.12.3, "CO₂ Systems" to clarify the remedial actions to be taken when one or more CO₂ fire suppression systems become inoperable.

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

David H. Jaffe, Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 58 to NPF-49
- 2. Safety Evaluation

cc w/enclosures:

See next page

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Mr. E. J. Mroczka
Northeast Nuclear Energy Company

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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. 58
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 July 31, 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.

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. 58 , 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: November 15, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 58

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 7-35
B3/4 7-7
B3/4 7-8

Insert

3/4 7-35
B3/4 7-7
B3/4 7-8

PLANT SYSTEMS

CO₂ SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.12.3 The following CO₂ Systems shall be OPERABLE:

- a. A Emergency Generator Fuel Oil Tank Vault, (*)
- b. B Emergency Generator Fuel Oil Tank Vault, (*)
- c. North Electrical Tunnel, (*)
- d. South Electrical Tunnel, (*)
- e. Cable Spreading Room,
- f. West Switchgear Room, (*)
- g. East Switchgear Room, (*)
- h. A MCC and Rod Control Area, (*) and
- i. B MCC and Rod Control Area. (*)

APPLICABILITY: Whenever equipment protected by the CO₂ Systems is required to be OPERABLE.

ACTION:

- a. With the cable spreading room CO₂ system not OPERABLE, within 1 hour establish a continuous fire watch with backup fire suppression equipment.
- b. With one or more of the above required CO₂ systems (as indicated by asterisk(*)) not OPERABLE, within 1 hour verify that the fire barrier between adjacent areas is OPERABLE, and:
 1. If the fire barrier is OPERABLE, establish an hourly fire watch patrol for the affected area, or
 2. If the fire barrier is not OPERABLE, establish a continuous fire watch for the affected area.
- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.12.3.1 Each of the above required CO₂ Systems shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path is in its correct position.

PLANT SYSTEMS

BASES

3/4.7.11 SEALED SOURCE CONTAMINATION (Continued)

plutonium. This limitation will ensure that leakage from Byproduct, Source, and Special Nuclear Material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.7.12 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO₂, Halon, fire hose stations, and yard fire hydrants.

The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

In the event that the Fire Suppression System in the Cable Spreading Room is inoperable, a continuous fire watch is required due to the presence of redundant safe shutdown systems and/or components in the Cable Spreading Room that could be damaged by a common fire. The criteria for redundancy is described in Branch Technical Position (BTP) 9.5-1.

The Surveillance Requirements provide assurance that the minimum OPERABILITY requirements of the Fire Suppression Systems are met. An allowance is made for ensuring a sufficient volume of Halon in the Halon storage tanks by verifying either the weight or the level of the tanks. Level measurements are made by either a U.L. or F.M. approved method.

In the event the Fire Suppression Water System becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

PLANT SYSTEMS

BASES

3/4.7.13 FIRE RATED ASSEMBLIES

The functional integrity of the fire rated assemblies and barrier penetrations ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. These design features minimize the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishing of the fire. The fire barrier penetrations are a passive element in the facility Fire Protection Program and are subject to periodic inspections.

Fire barrier penetrations, including cable penetration barriers, fire doors and dampers are considered functional when the visually observed condition is the same as the as-designed condition. For those fire barrier penetrations that are not in the as-designed condition, an evaluation shall be performed to show that the modification has not degraded the fire rating of the fire barrier penetration.

During periods of time when a barrier is not functional, either: (1) a continuous fire watch is required to be maintained in the vicinity of the affected barrier, or (2) the fire detectors on at least one side of the affected barrier must be verified OPERABLE and an hourly fire watch patrol established until the barrier is restored to functional status.

3/4.7.14 AREA TEMPERATURE MONITORING

The area temperature limitations ensure that safety-related equipment will not be subjected to temperatures in excess of their environmental qualification temperatures. Exposure to excessive temperatures may degrade equipment and can cause a loss of its OPERABILITY. The temperature limits include an allowance for instrument error of $\pm 2.2^{\circ}\text{F}$.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 58

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 July 31, 1990, Northeast Nuclear Energy Company, et al. (the licensee), requested changes to Millstone Unit 3 Technical Specifications (TS).

The proposed amendment would change Millstone Unit 3 Technical Specification (TS) 3.7.12.3, "CO₂ Systems" to clarify the remedial actions to be taken when one or more CO₂ fire suppression systems become inoperable.

DISCUSSION AND EVALUATION

At the present time, Action Statement "a" for TS 3.7.12.3 requires that,

With one or more of the above required CO₂ Systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol.

In the case of TS 3.7.12.3, the "... above required CO₂ systems" is a list of systems which does not distinguish between (1) "... areas in which redundant systems or components could be damaged" and (2) "... other areas." The licensee states in their July 31, 1990 application that the cable spreading room contains the only CO₂ system which protects redundant systems or components. Accordingly, the licensee has proposed that Action Statement "a" be divided as follows:

- a. With the cable spreading room CO₂ system not OPERABLE, within 1 hour establish a continuous fire watch with backup fire suppression equipment.
- b. With one or more of the above required CO₂ systems (as indicated by asterick (*)) not OPERABLE, within 1 hour verify that the fire barrier between adjacent areas is OPERABLE, and:
 1. If the fire barrier is OPERABLE, establish an hourly fire watch patrol for the affected area, or

2. If the fire barrier is not OPERABLE, establish a continuous fire watch for the affected area.

In the case of the above, the systems indicated by an asterick are all CO₂ systems except the CO₂ system in the cable spreading room.

The NRC staff has reviewed the Millstone Unit 3 Fire Protection Evaluation Report regarding the fire areas addressed in TS 3.7.12.3. We concur with the licensee that the cable spreading room is the only area addressed in TS 3.7.12.3 that contains redundant safe shutdown equipment that could be damaged by a fire. Accordingly, the cable spreading room is the only area that should be subjected to the more stringent requirements of proposed TS 3.7.12.3, Action "a". Based upon the above, we conclude that the proposed change to TS 3.7.12.3 clarifies the TS requirements, provides at least an equivalent level of protection when compared to the existing TS and is therefore acceptable.

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. 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: November 15, 1990

Principal Contributor:

D. Jaffe