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Docket No. 50-336

Mr. W. G. Council, Vice President
 Nuclear Engineering & Operations
 Northeast Nuclear Energy Company
 P. O. Box 270
 Hartford, Connecticut 06101

Dear Mr. Council:

The Commission has issued the enclosed Amendment No. 60 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your applications dated June 26 and July 10, 1980 as supplemented by letters of May 13 and August 7, 1980.

The TS changes: (1) allow containment electrical penetrations module replacement concurrent with fuel movement or core alterations and (2) renumber the access doors to the spent fuel pool area to agree with the security plan. Some portions of your proposed TS have been modified to meet our requirements. These modifications have been discussed with and agreed to by your staff.

We agree that Emergency Procedure 2520 will need to be modified to ensure that containment integrity can be obtained within ten (10) minutes of a fuel handling accident. Your staff has agreed to perform a realistic test to ensure this integrity is obtainable prior to allowing module replacement during core refueling. The NRC Inspection and Enforcement resident inspector has been requested to review the procedure changes and related testing for acceptability in accordance with your commitments.

A copy of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

/S/ Charles Trammell
 for/

Robert A. Clark, Chief
 Operating Reactors Branch #3
 Division of Licensing

8009030 048

Enclosures:

1. Amendment No. 60
2. Safety Evaluation
3. Notice

Stamp:
 J Wetmore
 8/14/80

Handwritten:
 CMT Trammell
 8/19/80
 CP

Handwritten:
 Amend & F.I.
 Notice only

OFFICE	ORB#3:DL	ORB#3:DL	C-ORB#3:DL	AD-ORB:DL	OELD
SURNAME	PKreutzer	MConner	RClark	TNovak	st. R. GRAY
DATE	8/15/80	8/15/80	8/15/80	8/15/80	8/15/80



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555
August 19, 1980

DISTRIBUTION:
Docket File
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PMKreutzer

Docket No. 50-336

Docketing and Service Section
Office of the Secretary of the Commission

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- Notice of Availability of Applicant's Environmental Report.
- Notice of Proposed Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).

Other: Amendment No. 60
Referenced documents have been provided the PDR

Division of Licensing, ORB#3
Office of Nuclear Reactor Regulation

Enclosure:
As Stated

OFFICE →	ORB#3:DL					
SURNAME →	PMKreutzer/jll					
DATE →	8/20/80					



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
August 19, 1980

Docket No. 50-336

Mr. W. G. Council, Vice President
Nuclear Engineering & Operations
Northeast Nuclear Energy Company
P. O. Box 270
Hartford, Connecticut 06101

Dear Mr. Council:

The Commission has issued the enclosed Amendment No. 60 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your applications dated June 26 and July 10, 1980 as supplemented by letters of May 13 and August 7, 1980.

The TS changes: (1) allow containment electrical penetrations module replacement concurrent with fuel movement or core alterations and (2) renumber the access doors to the spent fuel pool area to agree with the security plan. Some portions of your proposed TS have been modified to meet our requirements. These modifications have been discussed with and agreed to by your staff.

We agree that Emergency Procedure 2520 will need to be modified to ensure that containment integrity can be obtained within ten (10) minutes of a fuel handling accident. Your staff has agreed to perform a realistic test to ensure this integrity is obtainable prior to allowing module replacement during core refueling. The NRC Inspection and Enforcement resident inspector has been requested to review the procedure changes and related testing for acceptability in accordance with your commitments.

A copy of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

for Charles M. Trammell
Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosures:

1. Amendment No. 60
2. Safety Evaluation
3. Notice

cc w/enclosures:
See next page

8009030048

Northeast Nuclear Energy Company

cc:

William H. Cuddy, Esquire
Day, Berry & Howard
Counselors at Law
One Constitution Plaza
Hartford, Connecticut 06103

Anthony Z. Roisman
Natural Resources Defense Council
917 15th Street, N.W.
Washington, D.C. 20005

Mr. Lawrence Bettencourt, First Selectman
Town of Waterford
Hall of Records - 200 Boston Post Road
Waterford, Connecticut 06385

Northeast Nuclear Energy Company
ATTN: Superintendent
Millstone Plant
Post Office Box 128
Waterford, Connecticut 06385

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
U. S. Environmental Protection Agency
Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection Agency
Region I Office
ATTN: EIS COORDINATOR
John F. Kennedy Federal Building
Boston, Massachusetts 02203

Waterford Public Library
Rope Ferry Road, Route 156
Waterford, Connecticut 06385

Northeast Utilities Service Company
ATTN: Mr. James R. Himmelwright
Nuclear Engineering and Operations
P. O. Box 270
Hartford, Connecticut 06101

Mr. John Shedlosky
Resident Inspector/Millstone
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Mr. Charles B. Brinkman
Manager - Washington Nuclear
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C-E Power Systems
Combustion Engineering, Inc.
4853 Cordell Ave., Suite A-1
Bethesda, Maryland 20014

cc w/enclosure(s) and incoming
dtd.: 6/26/80; 7/10/80
5/13/80 & 8/7/80
Connecticut Energy Agency
ATTN: Assistant Director, Research
and Policy Development
Department of Planning and Energy
Policy
20 Grand Street
Hartford, Connecticut 06106



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

NORTHEAST NUCLEAR ENERGY COMPANY

CONNECTICUT LIGHT AND POWER COMPANY

HARTFORD ELECTRIC LIGHT COMPANY

WESTERN MASSACHUSETTS ELECTRIC COMPANY

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 60
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Northeast Nuclear Energy Company, et al. (the licensee) dated June 26 and July 10, 1980, as supplemented May 13 and August 7, 1980, comply 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 applications, 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 Appendices A and B, as revised through Amendment No. 60, 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles Trammell

Charles Trammell, Acting Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: August 19, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 60

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 area of change. The overleaf pages are provided to provide document completeness.

Pages ←

3/4 9-4

3/4 9-15

REFUELING OPERATIONS

DECAY TIME

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for a minimum of 72 hours prior to movement of irradiated fuel in the reactor pressure vessel.

APPLICABILITY: MODE 6.

ACTION:

With the reactor subcritical for less than 72 hours, suspend all operations involving movement of irradiated fuel in the reactor pressure vessel.

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least 72 hours by verification of the date and time of subcriticality prior to movement of irradiated fuel in the reactor pressure vessel.

REFUELING OPERATIONS

CONTAINMENT PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.9.4 The containment penetrations shall be in the following status:

- a. The equipment door closed and held in place by a minimum of four bolts,
- b. A minimum of one door in each airlock is closed, and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
 1. Closed by an isolation valve, blind flange, manual valve, or special device*, or
 2. Be capable of being closed by an OPERABLE automatic containment purge valve.

APPLICABILITY: DURING CORE ALTERATIONS OR MOVEMENT OF IRRADIATED FUEL WITHIN THE CONTAINMENT.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or movement of irradiated fuel in the containment.

SURVEILLANCE REQUIREMENTS

4.9.4 Each of the above required containment penetrations shall be determined to be either in its isolated condition or capable of being closed by an OPERABLE automatic containment purge valve within 72 hours prior to the start of and at least once per 31 days during CORE ALTERATIONS or movement of irradiated fuel in the containment by:

- a. Verifying the penetrations are in their isolated condition, or
- b. Testing the containment purge valves per the applicable portions of Specification 4.6.3.1.2.

* During fuel movement or core alterations, up to two (2) electrical penetrations modules in each penetration room [four (4) total] may be removed. At any time a module is removed, there will be an approved and tested means to secure containment by plugging the openings within ten (10) minutes of a fuel handling accident. This means is as described by licensee letters dated June 26 and August 7, 1980, and is effective only for the August 1980 refueling outage.

TABLE 3.9-1

ACCESS DOORS TO SPENT FUEL POOL AREA

<u>Door No.</u>	<u>Elevation</u>	<u>Location</u>	<u>Type</u>	<u>Area Serviced</u>
291	14'6"	M.7 - 18.5	Double Door	SFP Skimmer System
292 297 ^{or}	14'6"	R/S - 18.9 S-18.9/20.0	Double Door 8' Rollup Door ^{or}	Solidification System
293	14'6"	Q/R - 18.0	Double Door	Maintenance Shop
208	14'6"	S - 18.9	16' Rollup Door	Railway Access
294	14'6"	Q - 20.7	Single Door	D/G Room
295	38'6"	F.8 - 18	8' Rollup Door	Aux. & R. W. HVAC
296	38'6"	F.8 - 18.5	Single Door	Aux. & R. W. HVAC
297	38'6"	F.8 - 18.5	Single Door	North Stairwell
---	38'6"	H.4 - 18.9	Double Sliding Door	Elevator
298	38'6"	M.4 - 18.9	Single Door	Penetration Room
299	38'6"	M.7 - 18.9	Double Door	Main Exh. Fan Room
247	38'6"	M.7 - 17.2	Single Door	South Stairwell
254	55'6"	S - 17.2	Single Door	Roof Above Storage Floor
253	55'6"	S - 18.9	Single Door	Roof Above F. O. Tanks

REFUELING OPERATIONS

STORAGE POOL AREA VENTILATION SYSTEM - FUEL STORAGE

LIMITING CONDITION FOR OPERATION

3.9.15 At least one Enclosure Building Filtration System shall be OPERABLE and capable of automatically initiating operation in the auxiliary exhaust mode and exhausting through HEPA filters and charcoal adsorbers on a storage pool area high radiation signal.

APPLICABILITY: WHENEVER IRRADIATED FUEL IS IN THE STORAGE POOL.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool until at least one spent fuel storage pool ventilation system is restored to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.9.15 The above required Enclosure Building Filtration System shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 10 hours with the heaters on.
- b. At least once per 12 months or after every 720 hours of system operation and (1) after each complete or partial replacement of a HEPA filter or charcoal adsorber bank, or (2) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (3) following painting, fire or chemical release in any ventilation zone communicating with the system by:



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

Introduction

By applications dated June 26 and July 10, 1980, as supplemented by letters of May 13 and August 7, 1980, Northeast Nuclear Energy Company (NNECO or the licensee) requested amendment to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2 (MS-2).

The NNECO applications propose to: (1) add a footnote to Technical Specification (TS) 3.9.4.1.a.1 to authorize up to four (4) electrical penetrations of the containment to be removed concurrently with fuel movement or core alterations; and (2) change TS Table 3.1-1 to renumber the access doors to the spent fuel pool area to agree with the security plan.

Discussion and Evaluation

During the 1978 and 1979 refueling outages, considerable testing of the containment electrical penetrations and movement of some circuits was necessary to assure that all safety related conductors had insulation resistance greater than 100 megohms. Prior to issuance of the Cycle 3 reload amendment, dated May 12, 1979, NNECO agreed to propose a permanent type repair of these penetrations. This agreement was consummated in the letter of May 13, 1980 in which NNECO states its current plans to replace the modules associated with 32 of the 40 electrical penetrations during the 1980 refueling outage.

In the June 26, 1980 application, NNECO proposed that the replacement of the penetration modules be allowed during the time core refueling is proceeding. This would greatly improve the efficiency of the outage, but would require a TS change for the limiting conditions for operations (LCO) on containment penetrations (TS 3.9.4). This TS requires that:

- c. Each penetration providing direct access from the containment atmosphere shall be either:
 1. Closed by an isolation valve, blind flange, or manual valve, or
 2. Be capable of being closed by an OPERABLE automatic containment purge valve.

The above TS requirement is to ensure that the potential radiological consequences of a postulated fuel handling accident inside containment (FHAIC) remain within the bounds of the Safety Evaluation.

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While the penetration modules are being replaced during core refueling, NNECO proposes to:

- Provide dedicated personnel outside and inside containment to seal any open penetrations in the event of a FHAIC.
- Direct communications will exist at all times between the control room and the electrical penetration workers both inside and outside the containment.
- In the event of a FHAIC, workers inside and outside containment would seal any open electrical penetration upon direction from the control room.
- Electrical penetration module work, resulting in a breach of containment integrity, will be performed on not more than four penetrations at any time. In addition, work resulting in a breach of containment integrity will be performed on no more than two electrical penetrations at any time in each penetration room.

In the event of a fuel handling accident inside containment, personnel located in the electrical penetration areas would be instructed by the control room to isolate the containment. This would be done by installing a neoprene tapered plug immediately following removal of an existing penetration module, according to the NNECO letter of August 7, 1980. They state that this installation can easily be done in five (5) minutes from any starting condition. The analysis of record for the FHAIC (NNECO submittal dated March 21, 1977) assumes that containment isolation requires ten (10) minutes. Our review of the FHAIC was an independent analysis with acceptable results as documented in the Safety Evaluations for Amendment No. 52 (May 12, 1979).

In the August 7, 1980 letter, NNECO states that justification for the acceptability of this change included the following points:

- (1) Previous evaluations performed by both NNECO and the NRC Staff regarding a FHAIC would remain valid.
- (2) Direct communications from the control room to personnel located in the electrical penetrations would be maintained.
- (3) Penetration work resulting in a breach of containment integrity would be performed on no more than four (4) penetrations at any time, with no more than two (2) penetrations in each penetration room.

We find the replacement of containment electrical penetration modules during fuel movement or core alterations acceptable provided the controls, as described by NNECO letters dated June 26 and August 7, 1980, are implemented by approved and tested procedures. We will request the NRC Inspection and Enforcement resident inspector for MS-2 to confirm that Emergency Procedure 2520 has been modified appropriately to provide this control and that satisfactory testing of con-

tainment isolation using such procedures is completed before fuel handling and module replacement are performed concurrently.

In review of the proposed changes to TS Page 3/4 9-4, we find that modifications are necessary to more explicitly define the acceptable LCOs for the core refueling operation. Such modifications have been discussed with and agreed to by the NNECO staff. We find the modified TS changes acceptable.

In the July 10, 1980 application, NNECO proposed changes to TS Table 3.9-1 to renumber the access doors to the spent fuel pool area. In the current security plan, all Millstone Unit No. 1 security doors have numbers in the 100 series and, likewise, the Unit No. 2 doors are in the 200 series. Therefore, a TS change to renumber the security doors is necessary. Since this renumbering is administrative and no physical modifications are being made, we find the TS change for all doors except Nos. 292 and 207 (new numbers) acceptable.

Doors Nos. 292 and 207 are in different walls of the solidification system room. Therefore, closing either door will provide ventilation system control in the spent fuel pool area. We find the proposed change to require only one of these series doors to be closed during fuel movement acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 19, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-336NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.NOTICE OF ISSUANCE OF AMENDMENT TO FACILITYOPERATING LICENSE

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 60 to Facility Operating License No. DPR-65, issued to Northeast Nuclear Energy Company, the Connecticut Light and Power Company, the Hartford Electric Light Company, and Western Massachusetts Electric Company for operation of the Millstone Nuclear Power Station, Unit No. 2, (the facility) located in the Town of Waterford, Connecticut. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications to (1) allow containment electrical penetrations module replacement concurrent with fuel movement or core alterations, and (2) renumber the access doors to the spent fuel pool area to agree with the security plan.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior

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public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the applications for amendment dated June 26 and July 10, 1980 as supplemented May 13 and August 7, 1980, (2) Amendment No. 60 to License No. DPR-65, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, DC and at the Waterford Public Library, Rope Ferry Road, Route 156, Waterford, Connecticut. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 19th day of August 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles M. Trammell
Charles M. Trammell, Acting Chief
Operating Reactors Branch #3
Division of Licensing