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File*

REGULATORY DOCKET FILE COPY

Docket No. 50-336

MAY 29 1980

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. 58 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 in response to your application dated May 9, 1980.

The changes to the Technical Specifications permit storage of fuel assemblies containing 3.35 weight percent U-235 in your high density spent fuel storage racks in the spent fuel storage pool.

The high density fuel storage racks at Millstone Unit No. 2 have been previously reviewed and approved for storage of fuel assemblies having enrichments of 3.26 weight percent U-235 (Letter, NRC to Mr. D. C. Switzer, dated June 30, 1977). In our Safety Evaluation, accompanying the approval, we stated that the value of effective multiplication factor including all biases and uncertainties was 0.93. It is expected that increasing the enrichment to 3.35 weight percent U-235 would increase the effective multiplication factor by about 0.006 (based on the parametric results cited in the original evaluation).

The licensee has re-evaluated the effective multiplication factor for the increased enrichment fuel. Different calculational tools were employed for the re-evaluation (KENO-IV Monte-Carlo calculation instead of the DOT-2W discrete ordinates calculation). The results of the re-evaluation are conservative with respect to (i.e., higher than) the extrapolation of the previous results. The value calculated for the effective multiplication factor with all biases and uncertainties included is 0.946, which meets our criterion of less than 0.95. Accordingly, we find that the proposed modification to Technical Specification 5.6.1 is acceptable.

*ED*

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

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Mr. W. G. Counsil

- 2 -

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.

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.

A copy of the Notice of Issuance is also enclosed.

Sincerely,

Original signed by:

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

Enclosures:

1. Amendment No. 58 to DPR-65
2. Notice of Issuance

cc w/enclosures:  
See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555  
May 29, 1980

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Docket No. 50-336

Docketing and Service Section  
Office of the Secretary of the Commission

SUBJECT: MILLSTONE 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. 58  
Referenced documents have been provided PDR

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

Enclosure:  
As Stated

OFFICE →	ORB#4:DL					
SURNAME →	PKreutzer/jdc					
DATE →	5/30/80					



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

May 29, 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. 58 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 in response to your application dated May 9, 1980.

The changes to the Technical Specifications permit storage of fuel assemblies containing 3.35 weight percent U-235 in your high density spent fuel storage racks in the spent fuel storage pool.

The high density fuel storage racks at Millstone Unit No. 2 have been previously reviewed and approved for storage of fuel assemblies having enrichments of 3.26 weight percent U-235 (Letter, NRC to Mr. D. C. Switzer, dated June 30, 1977). In our Safety Evaluation, accompanying the approval, we stated that the value of effective multiplication factor including all biases and uncertainties was 0.93. It is expected that increasing the enrichment to 3.35 weight percent U-235 would increase the effective multiplication factor by about 0.006 (based on the parametric results cited in the original evaluation).

The licensee has re-evaluated the effective multiplication factor for the increased enrichment fuel. Different calculational tools were employed for the re-evaluation (KENO-IV Monte-Carlo calculation instead of the DOT-2W discrete ordinates calculation). The results of the re-evaluation are conservative with respect to (i.e., higher than) the extrapolation of the previous results. The value calculated for the effective multiplication factor with all biases and uncertainties included is 0.946, which meets our criterion of less than 0.95. Accordingly, we find that the proposed modification to Technical Specification 5.6.1 is acceptable.

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

Mr. W. G. Council

- 2 -

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.

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.

A copy of the Notice of Issuance is also enclosed.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert A. Clark". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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

Enclosures:

1. Amendment No. 58 to DPR-65
2. Notice of Issuance

cc w/enclosures:

See next page

Northeast Nuclear Energy Company

cc w/enclosure(s):  
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 T. Shedlosky  
U. S. Nuclear Regulatory Commission  
P. O. Drawer KK  
Niantic, CT 06357

cc w/enclosure(s) and incoming  
dtd.: May 9, 1980

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

THE CONNECTICUT LIGHT AND POWER COMPANY,  
THE HARTFORD ELECTRIC LIGHT COMPANY,  
WESTERN MASSACHUSETTS ELECTRIC COMPANY, AND  
NORTHEAST NUCLEAR ENERGY COMPANY

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 58  
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by The Connecticut Light and Power Company, The Hartford Electric Light Company, Western Massachusetts Electric Company and Northeast Nuclear Energy Company (the licensees) dated May 9, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations as 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. 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. 58, 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



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 29, 1980



ATTACHMENT TO LICENSE AMENDMENT NO. 58

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

Page

5-5

## DESIGN FEATURES

### VOLUME

5.4.2 The total water and steam volume of the reactor coolant system is 10,060 + 700/-0 cubic feet.

### 5.5 EMERGENCY CORE COOLING SYSTEMS

5.5.1 The emergency core cooling systems are designed and shall be maintained in accordance with the original design provisions contained in Section 6.3 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

### 5.6 FUEL STORAGE

#### CRITICALITY

5.6.1 The new and spent fuel storage racks are designed and shall be maintained with sufficient center-to-center distance between assemblies to ensure a  $k_{eff} < 0.95$  with the storage pool filled with unborated water. The maximum fuel enrichment to be stored in the fuel pool will be 3.35 w/o.

#### DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 22'6".

### 5.7 SEISMIC CLASSIFICATION

5.7.1 Those structures, systems and components identified as Category I Items in Section 5.1.1 of the FSAR shall be designed and maintained to the original design provisions contained in Section 5.8 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

### 5.8 METEOROLOGICAL TOWER LOCATION

5.8.1 The meteorological tower location shall be as shown on Figure 5.1-1.

## DESIGN FEATURES

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### 5.9 SHORELINE PROTECTION

5.9.1 The provisions for shoreline protection described in Amendments 34, 35 and 36 to the FSAR shall be completed by June 15, 1976. |

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

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 58 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 (the licensees), which revised Technical Specifications 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 permit storage of fuel assemblies containing 3.35 weight percent U-235 in the high density spent fuel storage racks in the spent fuel storage pool.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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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 application for amendment dated May 9, 1980, (2) Amendment No. 58 to License No. DPR-65, and (3) the Commission's letter dated May 29, 1980. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. 20555, 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, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 29th day of May 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

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