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Docket No. 50-423

Mr. Donald C. Switzer

President

Northeast Nuclear Energy

Company

P. O. Box 270

Hartford, Connecticut 06101

Dear Mr. Switzer:

Construction Permit No. CPPR-113 is enclosed, together with a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

The construction permit authorizes Northeast Nuclear Energy Company, et al to construct a pressurized water reactor, designated as Millstone Nuclear Power Station, Unit No. 3, at the site on the north shore of Long Island Sound in New London County, Connecticut.

Sincerely,

Original signed by Aw Dromerick fer/

D. B. Vassallo, Chief Light Water Reactors Project Branch 1-1 Directorate of Licensing

Enclosures:

1. Construction Permit CPPR-113

2. Federal Register Notice

cc: See page 2

bcc: J. R. Buchanan, ORNL

T. B. Abernathy, DTIE A. Rosenthal, ASLAB

N. H. Goodrich, ASLBP

(Note: Concurrence below indicates approval of Construction Permit as well as transmittal letter.)

AEC ISSUES CONSTRUCTION PERMIT FOR MILLSTONE 3 NUCLEAR POWER STATION AT WATERFORD, CONNECTICUT

A Construction Permit has been issued to Northeast Nuclear Energy Company by the Atomic Energy Commission's Directorate of Licensing for construction of Unit No. 3 at the Millstone Nuclear Power Station at Waterford, Connecticut.

Issuance of the permit on _____ came after completion of Atomic Safety and Licensing Board (ASLB) hearings on radiological health and safety matters which began June 17, 1974. ASLB hearings were held earlier on environmental considerations and the suitability of the site which is located about 40 miles southeast of Hartford, Connecticut. Millstone Unit 1 is in operation and Unit 2 is under construction at the site.

Preliminary construction work on Unit 3 was authorized under a Limited Work Authorization (LWA) issued to Northeast Nuclear by the AEC on June 5. The LWA followed AEC Regulatory Staff review and favorable findings by the ASLB on environmental considerations and site suitability.

Unit 3 would use a pressurized water reactor and would have a net electrical generating capacity of approximately 1,156,000 kilowatts.

Copies of the ASLB decision authorizing the Construction Permit are available for public inspection at the Waterford Public Library, Rope Ferry Road, Waterford, Connecticut, and at AEC's Public Document Room, 1717 H Street, N. W., Washington, D. C. A limited number of copies will be available from the Docketing and Service Section, Office of the Secretary of the Commission, U. S. Atomic Energy Commission, Washington, D. C. 20545.

cc: Mr. John J. Korkosz, Manager
City of Chicopee Electric
Light Department
725 Front Street
Chicopee, Massachusetts 01014

Mr. James E. Tribble
Assistant to the President
New England Electric System
20 Turnpike Road
Westborough, Massachusetts 06508

Mr. Bruce R. Garlick
Manager, Energy Supply
Fitchburg Gas and Electric
Light Company
655 Main Street
Fitchburg, Massachusetts 01421

Mr. Wardman K. Brooksbank, Manager
Town of South Hadley Electric
 Light Department
85 Main Street
South Hadley, Massachusetts 01075

Mr. Ralph H. Wood General Counsel Public Service Company of New Hampshire 1000 Elm Street Manchester, New Hampshire 03101

C. Duane Blinn, Esq.
Day, Berry & Howard
One Constitution Plaza
Hartford, Connecticut 06103

John D. Fassett, Vice President The United Illumnating Company 80 Temple Street New Haven, Connecticut 06508

Mr. H. R. Nims, Manager Nuclear Projects Northeast Utilities Service Company P. O. Box 270 Hartford, Connecticut 06101 Mr. Horace H. Brown
Director of Planning
Federal/State Relations
Department of Finance and Control
340 Capitol Avenue
Hartford, Connecticut 06115

Henry Kolbe, M.D.
Acting Commissioner of Public Health
Massachusetts Department of
Public Health
600 Washington Street
Boston, Massachusetts 02111

Honorable Philip W. Noel Governor of Rhode Island Providence, Rhode Island 02903

Dr. William E. Seymour, Staff Coord. New York State Atomic Energy Council New York State Department of Commerce 112 State Street Albany, New York 12207

Mr. Herbert J. Davis
First Selectman of the Town of
Waterford
Town Hall
Waterford, Connecticut 06385

Waterford Conservation Commission Town Hall 200 Boston Post Road Waterford, Connecticut 06385

Mr. Wallace Stickney Environmental Protection Agency JFK Federal Building Boston, Massachusetts 02203

- D. Safety features or components, if any, which require research and development have been described by the Applicants and the Applicants have identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;
- E. On the basis of the foregoing, there is reasonable assurance that

 (i) such safety questions will be satisfactorily resolved at or
 before the latest date stated in the application for completion of
 construction of the proposed facility and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed
 facility can be constructed and operated at the proposed location
 without undue risk to the health and safety of the public;
- F. The Applicants are technically qualified to design and construct the proposed facility;
- G. The Applicants are financially qualified to design and construct the proposed facility, as stated in paragraphs 3.E., 3.F., and 3.G., herein;
- H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
- I. After weighing the environmental, economic, technical and other benefits of the facility against environmental costs and considering available alternatives, the issuance of a construction permit subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied.
- 2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended, and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decisions of the Atomic Safety and Licensing Board, dated May 31, 1974, and July 25, 1974, the Atomic Energy Commission hereby issues a construction permit to the Applicants for a utilization facility designed to operate at 3411 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the Applicants and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Millstone Nuclear Power Station, Unit No. 3, will be located on the Applicants' site on the north shore of Long Island Sound, in the Town of Waterford, New London County, Connecticut.



UNITED STATES ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

ASHBURNHAM MUNICIPAL LIGHT PLANT, BOYLSTON MUNICIPAL LIGHTING PLANT,
CENTRAL VERMONT PUBLIC SERVICE CORPORATION, CHICOPEE MUNICIPAL LIGHTING
PLANT, CITY OF BURLINGTON, VERMONT, THE CONNECTICUT LIGHT AND POWER
COMPANY, FITCHBURG GAS AND ELECTRIC LIGHT COMPANY, GREEN MOUNTAIN POWER
CORPORATION, THE HARTFORD ELECTRIC LIGHT COMPANY, MARBLETON MUNICIPAL
LIGHT DEPARTMENT, MIDDLETON MUNICIPAL LIGHT DEPARTMENT, MONTAUP
ELECTRIC COMPANY, NEW ENGLAND POWER COMPANY, NORTH ATTLEBOROUGH
ELECTRIC DEPARTMENT, NORTHEAST NUCLEAR ENERGY COMPANY, PAXTON MUNICIPAL
LIGHT DEPARTMENT, PEABODY MUNICIPAL LIGHT PLANT, PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, SHREWSBURY LIGHT PLANT, TEMPLETON MUNICIPAL LIGHTING PLANT,
TOWN OF SOUTH HADLEY ELECTRIC LIGHT DEPARTMENT, THE UNITED ILLUMINATING
COMPANY, VERMONT ELECTRIC POWER COMPANY, INC., WAKEFIELD MUNICIPAL LIGHT
DEPARTMENT, WEST BOYLSTON MUNICIPAL LIGHTING PLANT, WESTERN MASSACHUSETTS
ELECTRIC COMPANY, WESTFIELD GAS AND ELECTRIC LIGHT DEPARTMENT*

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

CONSTRUCTION PERMIT

Construction Permit No. CPPR-113

- 1. The Atomic Energy Commission (the Commission) having found that:
 - A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended (the Act), and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;
 - B. The Applicants have described the proposed design of the Millstone Nuclear Power Station, Unit No. 3 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design and have identified the major features or components incorporated therein for the protection of the health and safety of the public;
 - C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;

^{*} Hereafter referred to as Applicants.

- 3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:
 - A. The earliest date for the completion of the facility is October 1, 1978, and the latest date for completion is October 1, 1979.
 - B. The facility shall be constructed and located at the site as described in the application, in New London County, Connecticut.
 - C. This construction permit authorizes the Applicants to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.
 - D. This facility is subject to the following conditions for the protection of the environment:
 - (1) The Applicants shall take the necessary mitigating actions during construction of the facility and associated transmission lines, including those set forth in Section 4.6 of the Final Environmental Statement, to avoid unnecessary adverse environmental impacts from construction activities. Before engaging in a construction activity that may result in a significant adverse environmental impact that was not evaluated or that will be considerably greater than was evaluated in the Final Environmental Statement, the Applicants shall provide written notification to the Director of Licensing.
 - (2) The Applicants shall continue their efforts to reduce the visual impact of the facility by appropriate landscaping techniques, and provide suitable vegetation to screen the transmission line right-of-way at crossings of well-traveled roads.
 - (3) The Applicants shall incorporate methods or techniques shown by tests on Millstone Nuclear Power Station, Units 1 and 2 to be beneficial for reducing mortality resulting from impingement of biota on cooling water intake screens.
 - (4) The Applicants shall study the effects of Units 1 and 2 circulating water discharges through the 60-ft-wide quarry cut, determine the location and extent of the thermal plume for all tidal stages and provide an estimate of ecological effects of the discharge.

Based on these operational studies, the effects of station operation shall also be estimated for discharges through a 90-ft-wide cut and the proposed 115-ft-wide cut. Costs of pumping against increased head, costs of recirculation in terms of reduced plant efficiency, and ecological effects shall be determined for the following modes of operation: Unit 1 alone; Units 1 and 2; Units 1, 2 and 3; and for Unit 3 at full power with additional pumping through non-operating units. The study shall be submitted for Regulatory staff approval prior to enlarging the 60-ft quarry cut.

- (5) The Applicants shall conduct a comprehensive environmental sampling, monitoring, and surveillance program (biological, chemical, thermal, and radiological) satisfactory to the Regulatory staff, as discussed in Section 6 of the Final Environmental Statement.
- (6) If significant harmful effects or evidence of irreversible damage are detected by the monitoring programs, the Applicants shall provide an analysis and a proposed course of action to alleviate the problem.
- E. The following Applicants, with their proposed individual ownership interests in Millstone Nuclear Power Station, Unit No. 3 are firmly committed to become owners of 100% of the facility and are financially qualified to design and construct the facility:

The Connecticut Light and Power Company The Hartford Electric Light Company Western Massachusetts Electric Company New England Power Company Public Service Company of New Hampshire Central Vermont Public Service Corporation The United Illuminating Company Montaup Electric Company Fitchburg Gas and Electric Light Company	39.750% 21.000 14.250 11.141 3.891 3.694 3.685 2.372 0.217 100.000%
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F. Each of the following utilities is financially qualified to become a joint owner of the facility by transfer to it from Central Vermont Public Service Corporation of an ownership interest not to exceed that specified for it in Section 20.0 on page 20-11 of the Safety Evaluation Report:

City of Burlington, Vermont Green Mountain Power Corporation Vermont Electric Power Company, Inc. G. Each of the following municipal systems, all located in the State of Massachusetts, would be financially qualified to be a joint owner of the facility by transfer to it from The Connecticut Light and Power Company, The Hartford Electric Light Company, Western Massachusetts Electric Company, and New England Power Company of an ownership interest not to exceed that specified for it in Section 20.0 on page 20-12 of the Safety Evaluation Report:

Ashburnham Municipal Light Plant
Boylston Municipal Lighting Plant
Chicopee Municipal Lighting Plant
Marblehead Municipal Light Department
Middleton Municipal Light Department
North Attleborough Electric Department
Paxton Municipal Light Department
Peabody Municipal Light Plant
Shrewsbury Municipal Light Plant
Templeton Municipal Lighting Plant
Town of South Hadley Electric Light Department
Wakefield Municipal Light Department
West Boylston Municipal Lighting Plant
Westfield Gas and Electric Light Department

However, since such municipal Applicants have not yet completed financing arrangements and have not yet completed ownership agreements for the facility, these municipal Applicants are subject to the following condition:

For each of the municipal systems identified in Paragraph 3.G, a certified copy of a resolution or ordinance, duly adopted in accordance with applicable provisions of State and local laws authorizing the issuance by said municipal systems of revenue bonds in connection with financing of their respective share of the total cost of the facility, shall be submitted within 30 days following the adoption of such resolution or ordinance and before the completion of agreements for ownership of their respective share of the facility.

H. The following information should be submitted monthly on or before the fifteenth day of the next month: (1) changes in identity and ownership interests; (2) proposed changes in the identity of owners of the facility or in the ownership interests of owners anticipated during the next six months together with a statement of the sources of funds for financing such changes; financial statements for the most recent three calendar or fiscal years applicable to new owners or existing owners who propose to increase their ownership interests,

and descriptions of proposed resolutions or ordinances to be enacted for financing the ownership interests of new owners or increases in the interests of existing owners if applicable; (3) job progress reports submitted to each joint owner or participant; and (4) monthly invoices rendered each joint owner or participant for design and construction costs of the facility.

- 4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the Applicants submit to the Commission the complete final safety analysis report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D were satisfied; and (d) the Applicants submit proof of financial protection and the execution of an indemmity agreement as required by Section 170 of the Act.
- 5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE ATOMIC ENERGY COMMISSION

for

A. Giambusso, Deputy Director

for Reactor Projects
Directorate of Licensing

Date of Issuance: August 9, 1974

CHECKLIST FOR ISSUANCE OF CONSTRUCTION PERMIT

Applicant NORTHEAST NUCLEAR ENERGY COMPANY, ET AL	Docket No. 50-423
Facility MILLSTONE NUCLEAR POWER STATION, UNIT NO.	3
Project Manager A. W. Dromerick Licensing Ass	istant Jean Lee
	Date
Initial Decision or Order	5/31/74 (Env.) 7/25/74 (Rad.)
Safety Review: L Safety Evaluation ACRS Letter	March 13, 1974 April 16, 1974
Environmental Review: Final Environmental Statement Published in Federal Register	February 1974 Feb 6, 1974
Motifications Required by Act & Commission Rules*: State Official Local Official FPC State Regulatory Agencies	March 21, 1973 March 21, 1973 March 21, 1973 March 21, 1973
Water Quality Certification: 401 Type Submitted by Applicant Transmitted to EPA	April 23, 1974 May 1, 1974
Antitrust Review: Attorney General's Advice Published in Federal Register Hearing and/or Decision	August 17, 1973 (37FR22249) No Hearing
License Fee: Amount \$\frac{829,870}{29} \text{Paid}	Received 8/9/74
Public Announcement (to be released): (attach copy if available)	Copy attached
Issuance Package: OGC Concurrence	•
 Permit Federal Register Notice Letter to Applicant Information Report 	August 1, 1974 August 1, 1974 August 1, 1974 August 1, 1974

DX

^{*}Date initial application forwarded