

April 26, 2000

Mr. S. E. Scace - Director
Nuclear Oversight and Regulatory Affairs
c/o Mr. David A. Smith
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385-0128

SUBJECT: ISSUANCE OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT REGARDING TECHNICAL SPECIFICATION CHANGE RELATED TO FUEL HANDLING AND CASK DROP ACCIDENTS, MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 (TAC NO. MA7712)

Dear Mr. Scace:

Enclosed is a copy of an "Environmental Assessment and Finding of No Significant Impact" related to your application for amendment dated December 14, 1999, as supplemented by letters dated February 11 and March 30, 2000. This amendment would amend Technical Specifications (TSs) Sections: 3.3.2.1, "Instrumentation - Engineered Safety Feature Actuation System Instrumentation"; 3.3.3.1, "Instrumentation - Monitoring Instrumentation - Radiation Monitoring"; 3.7.6.1, "Plant Systems - Control Room Emergency Ventilation System"; 3.9.3.1, "Refueling Operations - Decay Time"; 3.9.4, "Refueling Operations - Containment Penetrations"; 3.9.9, "Refueling Operations - Containment Radiation Monitoring"; 3.9.10, "Refueling Operations - Containment Purge Valve Isolation System"; 3.9.13, "Refueling Operations - Storage Pool Radiation Monitoring"; 3.9.14, "Refueling Operations - Storage Pool Area Ventilation System - Fuel Movement"; 3.9.15, "Refueling Operations - Storage Pool Area Ventilation System - Fuel Storage"; 3.9.16.1, "Refueling Operations - Shielded Cask"; 3.9.16.2, "Refueling Operations - Shielded Cask"; 3.9.17, "Refueling Operations - Movement of Fuel in Spent Fuel Pool"; and 3.9.19.2, "Refueling Operations - Spent Fuel Pool - Storage Pattern," and add new TS 3.3.4, "Containment Purge Valve Isolation Signal." The requested changes would make the TSs and the Final Safety Analysis Report (FSAR) consistent with the new analyses of the fuel handling and cask drop accidents. The Index Pages and the Bases for these TSs would be modified to reflect these changes.

S. Scace

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The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

Jacob I. Zimmerman, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosure: Environmental Assessment

cc w/encl: See next page

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

Jacob I. Zimmerman, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosure: Environmental Assessment
cc w/encl: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-65, issued to the Northeast Nuclear Energy Company, et al., (NNECO or the licensee), for operation of the Millstone Nuclear Power Station, Unit No. 2, located in Waterford, Connecticut.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed amendment would revise Technical Specification (TS) Sections: 3.3.2.1, "Instrumentation - Engineered Safety Feature Actuation System Instrumentation"; 3.3.3.1, "Instrumentation - Monitoring Instrumentation - Radiation Monitoring"; 3.7.6.1, "Plant Systems - Control Room Emergency Ventilation System"; 3.9.3.1, "Refueling Operations - Decay Time"; 3.9.4, "Refueling Operations - Containment Penetrations"; 3.9.9, "Refueling Operations - Containment Radiation Monitoring"; 3.9.10, "Refueling Operations - Containment Purge Valve Isolation System"; 3.9.13, "Refueling Operations - Storage Pool Radiation Monitoring"; 3.9.14, "Refueling Operations - Storage Pool Area Ventilation System - Fuel Movement"; 3.9.15, "Refueling Operations - Storage Pool Area Ventilation System - Fuel Storage"; 3.9.16.1, "Refueling Operations - Shielded Cask"; 3.9.16.2, "Refueling Operations - Shielded Cask"; 3.9.17, "Refueling Operations - Movement of Fuel in Spent Fuel Pool"; and 3.9.19.2, "Refueling

Operations - Spent Fuel Pool - Storage Pattern,” and add new TS 3.3.4, “Containment Purge Valve Isolation Signal.” The requested changes would make the TSs and the Final Safety Analysis Report (FSAR) consistent with new analyses of the fuel handling and cask drop accidents. The Index Pages and the Bases for these TSs would be modified to reflect these changes.

The proposed action is in accordance with the licensee's amendment request dated December 14, 1999, as supplemented on February 11 and March 30, 2000.

The Need for the Proposed Action:

The proposed action is needed for the licensee to move new and spent fuel while the containment is open during refueling operations. As a result of the recovery effort for Millstone Unit No. 2, NNECO determined that the current analysis of a fuel handling accident inside containment is not valid since the current analysis is not conservative with respect to the amount of fuel damage that will occur. As a result, Millstone Unit No. 2 will be required to keep containment isolated during fuel movement inside containment until a revised analysis is approved by the Commission. With the containment isolated, high temperature and humidity conditions create an adverse environment for individuals working inside containment. This type of environment is a personnel safety concern and can increase the potential for human errors. In addition, the revised analysis includes a provision to maintain the personnel air lock doors open under administrative control. This will greatly simplify normal entry and egress. This provision will also decrease the time necessary to evacuate containment in the event of a fuel handling accident, thereby decreasing personnel exposure.

Environmental Impacts of the Proposed Action:

The Commission has completed its assessment of the potential environmental impacts associated with the TS. These TS changes are supported by a revised fuel handling analyses and cask drop accident analyses. The impact of the above proposed TS changes has been

evaluated by the Commission in consideration for approval of the changes and supporting analyses. The TS change will not significantly increase the probability of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. The consequences of the postulated accidents, related to fuel handling and cask drop accidents, will be greater than previously evaluated. However, the consequences remain well within Part 100 doses (25 percent of 10 CFR Section 100.11(a)(1)) for offsite releases. Therefore, the TS changes will not significantly increase the consequences of any fuel handling or cask drop accidents. In addition, while the TS change described is a substantial change, its efficacy has been demonstrated in other operating facilities. The TS change will not significantly increase the probability or consequences of accidents. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with this proposed TS amendment.

With regard to potential non-radiological impacts, the proposed amendment does involve features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the application would result in no significant change in current environmental impacts. Such action would not enhance the protection of the

environment and would result in unjustified hardship to the licensee. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Millstone Nuclear Power Station, Unit No. 2.

Agencies and Persons Consulted:

In accordance with its stated policy, on April 25, 2000, the staff consulted with the Connecticut State official, Michael Firsick of the Division of Radiation, Department of Environmental Protection, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated December 14, 1999, as supplemented by letters dated February 11 and March 30, 2000, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC. Publically available records will be accessible electronically from the Agencywide Documents Access and Management System (ADAMS)

Public Library component of the NRC Web site, <<http://www.nrc.gov>> (the Electronic Reading Room).

Dated at Rockville, Maryland, this 25th day of April 2000.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Jacob I. Zimmerman, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Millstone Nuclear Power Station
Unit 2

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