

June 6, 1996

Mr. Ted C. Feigenbaum  
Executive Vice President and  
Chief Nuclear Officer  
Northeast Utilities Service Company  
c/o Mr. Terry L. Harpster  
P.O. Box 128  
Waterford, CT 06385

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT - MILLSTONE NUCLEAR  
POWER STATION, UNIT NO. 2 (TAC NO. M95501)

Dear Mr. Feigenbaum:

The Commission has requested the Office of the Federal Register to publish the enclosed "Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for Hearing." This notice relates to your amendment application dated June 3, 1996, which would provide a one-time change to the Millstone Unit 2 Technical Specification 3.9.1 "Refueling Operations, Boron Concentration." The proposed change would remove the requirement that the boron concentration in all filled portions of the Reactor Coolant System be "uniform." This change would only be applicable during the Millstone Unit 2 Cycle 13 mid-cycle core offload.

Sincerely,

(Original Signed By)

Daniel G. McDonald, Project Manager  
Northeast Utilities Project Directorate  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosure: Notice

cc w/enclosure: See next page

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Millstone Nuclear Power Station  
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UNITED STATES NUCLEAR REGULATORY COMMISSIONNORTHEAST UTILITIES SERVICE COMPANYDOCKET NO. 50-336NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

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

The proposed amendment would provide a one-time change to Millstone Unit 2 (MP2) Technical Specification 3.9.1, "Refueling Operations, Boron Concentration." The proposed change would remove the requirement that the boron concentration in all filled portions of the Reactor Coolant System be "uniform." This change would only be applicable during the MP2 Cycle 13 mid-cycle core offload.

On March 14, 1996, during surveillance testing, it was discovered that a Low Pressure Safety Injection (LPSI) valve could not be closed. In order to repair the valve, the Shutdown Cooling System will have to be removed from service since it is not possible to isolate flow through a stuck open LPSI valve with Shutdown Cooling in operation. The repair requires an offload of the core to the Spent Fuel Pool which will permit removal of the Shutdown Cooling System from service.

Since the core offload could not have been anticipated at the time of shutdown, the Reactor Coolant System was not borated to the refueling concentration required by the Technical Specifications (TSs).

The proposed one-time TS change would strike the words "of all filled portions" and "uniform and" and add a footnote indicating that, for the Cycle 13 mid-cycle core offload activities, it is acceptable for the boron concentrations of the water volumes in the steam generators and the connecting piping to be as low as 1300 ppm.

The Bases for 3.9.1 would be modified to explain that the boron concentration of the water volumes in the Pressurizer, Shutdown Cooling System, Reactor Vessel, Refueling Pool, and the associated connecting piping will be maintained at 1820 ppm boron concentration. This concentration will be high enough to ensure that, even in the unlikely event that all of the lower boron concentration water from the Steam Generators and connecting piping were to mix with the Shutdown Cooling System water, the resulting Shutdown Cooling System boron concentration will remain greater than the minimum required refueling boron concentration.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously

evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

The proposed changes do not involve [a significant hazards consideration] because the changes would not:

1. Involve a significant increase in the probability or consequence of an accident previously evaluated.

Refueling Operations Technical Specification 3.9.1 requires that, with the reactor vessel head unbolted or removed, the boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be maintained uniform and sufficient to ensure that the more restrictive of the following conditions is met:

- a. Either a  $K_{eff}$  of 0.95 or less, or
- b. A boron concentration of greater than or equal to 1720 ppm

The proposed technical specification change would strike the words "of all filled portions" and "uniform and" and add a footnote indicating that for the Cycle 13 mid-cycle core offload activities, it is acceptable for the boron concentrations of the water volumes in the steam generators and connecting piping to be as low as 1300 ppm. In addition, a surveillance will be added to determine that the boron concentration in the steam generators is greater than or equal to 1300 ppm prior to entry into Mode 6.

The impact of the change on the boron dilution accident and the loss of shutdown cooling flow has been evaluated. Based upon this evaluation, the proposed change to Technical Specification 3.9.1 does not involve a significant increase in the probability or consequences of these accidents. The probability of a boron dilution accident or a loss of shutdown cooling event is not increased by allowing the RCS [reactor coolant system] boron concentration in the stagnant regions of the RCS to be less than the previously required concentration since this is compensated by increasing the boron concentration requirement of the shutdown cooling loop in Mode 6. The consequences of a boron dilution accident would not be increased. In fact, the compensatory measure of increasing the RCS boron concentration in the shutdown cooling loops and reactor vessel core regions will result in a higher initial boron concentration for the boron dilution accident, which would actually increase the time to core criticality, ensuring that

the operator has at least 30 minutes to intervene. The consequences of a loss of shutdown cooling flow are not increased as the core would continue to remain greater than 5% subcritical without operator intervention even if the less borated water in the stagnant regions of the RCS reached the core regions without mixing.

2. Create the possibility of a new or different kind of accident from any previously evaluated.

By maintaining 1820 ppm in the active region of the RCS, the required shutdown margin is assured, even in the unlikely event that the stagnant [regions] of the RCS mix with the active regions. Thus, the proposed technical specification change would not create the possibility of a new or different type of accident than previously evaluated. Further, the proposed change has no impact on the mitigation of a boron dilution accident or a loss of shutdown cooling event.

3. Involve a significant reduction in the margin of safety.

The proposed technical specification change will not result in a significant reduction in the margin of safety. The results of the boron dilution accident, and the loss of shutdown cooling event are not adversely impacted by the modification to the RCS boration technical specification. In the event of a boron dilution accident, the operator will continue to have at least 30 minutes to prevent core criticality. Without crediting operator intervention, the potential core boron reduction associated with a loss of shutdown cooling event will not result in core criticality. As such, there is no reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would

result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D22, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By July 12, 1996 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings"

in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Learning Resources Center, Three Rivers Community-Technical College, 574 New London Turnpike, Norwich, Connecticut 06360 and the Waterford Library, ATTN: Vince Juliano, 49 Rope Ferry Road, Waterford Connecticut 06385. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days

prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to Phillip F. McKee: petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Ms. L.M. Cuoco, Senior Nuclear Counsel, Northeast Utilities Services Company, Post Office Box 270, Hartford, Connecticut 06141-0270, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated June 3, 1996, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Learning Resources Center, Three Rivers Community-Technical College, 574 new London Turnpike, Norwich, Connecticut 06360 and the Waterford Library, ATTN: Vince Juliano, 49 Rope Ferry Road, Waterford, Connecticut 06385.

Dated at Rockville, Maryland, this 6th day of June 1996.

FOR THE NUCLEAR REGULATORY COMMISSION



Phillip F. McKee, Director  
Northeast Utilities Project Directorate  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation