

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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April 2, 1990

Docket No. 50-423
B13495

Re: 10CFR50.90 and 50.91

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Reference: (1) E. J. Mroczka letter to T. T. Martin, Temporary Waiver of Compliance from Technical Specifications--Limiting Condition for Operation, dated April 1, 1990.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3
Proposed Revision to Technical Specifications
Fire Suppression Water System--Limiting Condition for Operation

Pursuant to 10CFR50.90 and 50.91, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend operating license NPF-49 by incorporating the change identified in Attachment 1 into the Technical Specifications of Millstone Unit No. 3. Specifically, ACTION statement 'c' of Technical Specification 3.7.12.1, "Fire Suppression Water System" is being modified to state that the provisions of Specification 3.0.3 and 3.0.4 are not applicable.

The proposed change would amend the Technical Specifications to allow start-up of the plant while utilizing the provisions of the ACTION statement associated with Technical Specification 3.7.12, "Fire Suppression Water System." Technical Specification 3.0.4 currently prohibits mode changes unless the requirements of all the Limiting Conditions for Operation (LCOs) are met without reliance on any ACTION statement. A change is proposed to Technical Specification 3.7.12.1 that would allow changes in operational modes while utilizing ACTION statement 'c'.

Reference (1) requested a temporary waiver of compliance from Technical Specification 3.0.4 to LCO 3.7.12.1 until an emergency license amendment is processed. NNECO is currently awaiting NRC issuance of the temporary waiver of compliance.

NNECO requests that this amendment be issued on an emergency basis in accordance with 10CFR50.91(a)(5). As discussed below, this request involves no significant hazards consideration and failure to act promptly would prevent start-up of the plant. Plant start-up (i.e., criticality) is currently scheduled for April 3, 1990.

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Background and Summary

On March 15, 1990, a leak in the Millstone Unit No. 3 yard fire water supply header was detected when the run time frequency of the site fire header system pressure maintenance pump increased with no additional load demands being implemented. To make a repair, it was determined that an underground section of the northeast fire water yard had to be isolated. Bypass jumper number 390-16 was prepared and then approved by the Plant Operations Review Committee (PORC) which established compensatory measures to be taken during the isolation and repair of the northeast fire header. This allowed the northeast section of the yard fire water supply header to be isolated and removed from service for excavation, location and repair of the leak. Additional lengths of fire hose were supplied to hydrant hose house No. 4. A continuous fire patrol was established at the reserve station services transformer and alternate sources of fire protection water were supplied to the fuel and engineered safety features buildings to ensure compliance with LCOs 3.7.12.5, 3.7.12.2, and 3.7.12.1. On March 29, 1990, the leak source was located. Due to the location of the leak, a repair is not immediately possible. Replacement of the faulty piping will take a minimum of seven days.

Millstone Unit No. 3 Technical Specification Section 3.0.4 states that entry into an operation mode or other specified condition shall not be made unless the LCO is met without reliance on the provisions of the ACTION statements. The intent is to ensure that a higher mode of operation is not entered when equipment is inoperable. This precludes a plant start-up if an LCO is not met, even if the ACTION statements would permit continued operation of the plant for an unlimited period of time. Generally, the individual specifications that have ACTION statements which allow continued indefinite operation note that Specification 3.0.4 does not apply (e.g., ACTIONS 'a' and 'b' of Section 3.7.12.1).

However, exceptions to Specification 3.0.4 have not been consistently applied. This is true in the case of Specification 3.7.12.1 where Millstone Unit No. 3 Technical Specifications are based on Westinghouse Standard Technical Specifications (STS). Exceptions to Specification 3.0.4 have not been applied to the STS Section 3.7.12.1 ACTION 'c'. To alleviate this problem, on June 4, 1987, the NRC issued Generic Letter 87-09, "Section 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Condition for Operation and Surveillance Requirements." In that Generic Letter, the Staff addressed three specific problems and provided alternatives to the STS to resolve these problems. One of those problems concerns LCOs applicable to entry into an operational mode which are more restrictive than ACTION statements applicable to the operational mode itself. The present request involves a change to Technical Specifications precisely as presented in the Generic Letter.

Further, for the reasons discussed herein, NNECO requests, pursuant to 10CFR50.91(a)(5), that this amendment be issued on an emergency basis to permit timely resumption of Millstone Unit No. 3 operation. NNECO

demonstrates below that this revision presents no significant hazards consideration. In fact, the request is consistent with recent Staff guidance regarding modification of Technical Specification LCOs which impose unnecessary restrictions on mode changes. Further, the need to request the amendment on an emergency basis could not have been reasonably avoided as explained below.

Due to the location of the leak in the yard fire water supply header, a redesign of the affected piping is required. Replacement of the faulty piping will take a minimum of seven days. In addition, a backup fire suppression water system has been established for the affected areas. For these reasons, issuance of the requested amendment on an emergency basis is warranted.

Justification for Emergency License Amendment

Pursuant to 10CFR50.91(a)(5), NNECO requests NRC approval of the license amendment described herein on an emergency basis. Emergency approval is appropriate because "an emergency situation exists, in that failure to act in a timely way would result in...prevention of either resumption of operation or of increase in power output to the plant's licensed power level..." and because, as discussed below, the amendment does not involve a significant hazards consideration.

Millstone Unit No. 3 has been in Mode 3 since the plant tripped on March 30, 1990, and emergency authorization is required to permit timely resumption of operation (i.e., criticality) which is currently scheduled for April 3, 1990. On March 15, 1990, a leak in the yard fire water supply header was detected when the run time frequency of the site fire header system pressure maintenance pump increased with no additional load demands on the pump. On March 19, 1990, the affected section of the yard fire water supply header was isolated and removed from service to repair the leak. Adequate compensatory measures were taken to satisfy ACTION Statement 'c'. In addition, a continuous fire watch patrol was established at the reserve station service transformer and alternate sources of fire protection water were supplied to the fuel and engineered safety features buildings to ensure compliance with LCOs of Sections 3.7.12.5, 3.7.12.2, and 3.7.12.1. On March 29, 1990, the leak source was located. In order to make the repair, it was determined that an underground section of the northeast fire water yard had to be isolated and removed from service for excavation, location, and repair of the leak. A repair will require redesigning of the affected piping. Therefore, NNECO decided to replace the faulty piping. It is estimated that a minimum of 7 days will be required to complete the replacement. NNECO could not have reasonably anticipated the reactor trip which occurred on March 30, 1990. In summary, therefore, emergency approval is warranted for this license amendment since an unavoidable emergency situation has resulted in the plant not being able to resume power operation. Further, this requested emergency authorization is appropriate because this amendment request does not involve a significant hazards consideration. The fire suppression water system does not have the potential to initiate any previously analyzed accident and the fire suppression water system is not credited in any accident analysis.

Applicability of Generic Letter 87-09

In addition to the technical justification described herein, NNECO notes that the proposed amendment is consistent with a recent NRC Staff position encouraging revision of Technical Specifications which involve unnecessary restrictions on mode changes. In Generic Letter 87-09,⁽¹⁾ the Staff describes acceptable revisions of three areas of current Technical Specifications. One of those areas concerns LCOs applicable to entry into an operational mode which are more restrictive than ACTION statements applicable to the operational mode itself. As an example of this condition, the Generic Letter describes the situation where ACTION statements would permit operation for an unlimited period of time under conditions for which an LCO would prohibit start-up. (See Generic Letter 87-09, Enclosure 1, Problem No. 1, pp. 1-3.) The present request involves a change to Technical Specifications precisely as is offered in the Generic Letter.

Specifically, although operation for an unlimited time is permitted in accordance with ACTION Statement 'c' of Specification 3.7.12.1, the LCO for entry into an operation mode is more restrictive, i.e., the entire fire suppression water system must be operable.

Accordingly, NNECO submits that the present amendment request would be appropriate, irrespective of the current situation. In fact, this emergency amendment represents one very limited aspect of the eventual scope of Generic Letter 87-09 changes to the Technical Specifications which we envision making in the long term. NNECO, of course, does not favor commencing operation with equipment unavailable independent of whatever provisions the Technical Specifications may contain. However, as explained herein, the fire suppression water system which is partially inoperable, is not required for safe plant operation and as required by Specification 3.7.12.1 ACTION Statement 'c', a backup fire suppression water system has been established. Consequently, NNECO believes the compelling considerations discussed herein fully justify issuance of this amendment. We will be evaluating the full scope of options presented in Generic Letter 87-09 on a more deliberate basis and will address them via a separate license amendment request.

Significant Hazards Consideration

In accordance with 10CFR50.92, NNECO has reviewed the attached proposed change and has concluded that it does not involve a significant hazards consideration. The basis for this conclusion is that the three criteria of

(1) Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements" (June 4, 1987).

10CFR50.92(c) are not compromised. The proposed change does not involve a significant hazards consideration because the change would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. Specification 3.0.3 requires when an LCO is not met, except as provided in the associated ACTION Statements, within one hour action shall be initiated to place the plant in a mode in which the Specification does not apply. Since Specification 3.7.12.1 applies at all times, Specification 3.0.3 cannot be met. It is noted that the systems, such as sprays, sprinklers and hoses that are supplied by the fire suppression water system and that protect safety-related equipment are individually controlled by other Technical Specifications. These individual Technical Specifications already have an exception to Specification 3.0.3. Since compensatory measures are required for those systems affected by the fire suppression water system, it is concluded that there is no significant impact on the reliability of the systems. Specification 3.0.4 states that an entry into an operation mode shall not be made unless the LCO is met without reliance on ACTION statements. In this case, the ACTION statement requires compensatory measures that provide a level of safety that is comparable to the LCO. Also, ACTION Statement 'c' allows operation for an unlimited period of time. Changing modes has no impact on the level of safety provided by the compensatory measures. Therefore, exception to Specification 3.0.4 will have no impact on the reliability of the safety systems. The proposed change has no impact on the probability of an accident. There are no design basis accidents impacted by the proposed change. The fire suppression water system is not credited in any accident analysis nor is a fire an initiator assumed in any accident analysis. Therefore, there is no impact on the consequences or probability of any design basis accident.
2. Create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed change will not affect plant response in any way, and there are no new failure modes associated with the change that would create a new accident. Compensatory measures are provided for the inoperable portion of the fire suppression water system so that the likelihood of fire that is not suppressed is not affected. Therefore, there is no impact on the probability of an unmitigated fire such that it should be considered part of the design basis.
3. Involve a significant reduction in safety margin. The proposed change only affects the availability of the fire suppression water system and the compensatory measures, such as a backup fire suppression water system, are provided for the inoperable portion of the fire suppression water system. Therefore, protective boundaries are not affected. Allowing the plant to start-up in accordance with

ACTION Statement 'c' is consistent with the basis of this Technical Specification.

In summary, for the reasons above, NNECO has concluded that start-up and operation of the plant in accordance with the proposed amendment would not involve a significant hazards consideration.

Moreover, the Commission has provided guidance concerning the application of standards in 10CFR50.92 by providing certain examples (51 FR 7751, March 6, 1986) of amendments that are considered not likely to involve a significant hazards consideration. Although the proposed change herein is not enveloped by a specific example, the proposed change would not involve a significant increase in the probability or consequences of an accident previously analyzed. The proposed change only affects the availability of the fire suppression water system. The fire suppression water system is not credited in any design basis accident analysis. Compensatory measures are provided for the inoperable portion of the fire suppression water system so that the likelihood of a fire that is not suppressed is not affected. Therefore, it is concluded that there can be no adverse impact on the consequences of any accident. It is also reiterated that the subject amendment request conforms precisely with the changes recommended by the Staff via Generic Letter 87-09.

Conclusion

NNECO has concluded that it is appropriate and necessary that this amendment request be processed on an emergency basis for the following reasons:

- o The amendment request is needed to permit timely resumption of plant operation.
- o The license amendment request does not constitute a significant hazards consideration.

We also wish to emphasize our conclusion that this proposed amendment involves no undue safety risk. We are therefore requesting this action to permit timely resumption of plant operation, an action which is in the best interest of the health and safety of the public, our customers, and shareholders.

Based upon the information contained in this submittal and the environmental assessment for Millstone Unit No. 3, there are no significant radiological or nonradiological impacts associated with the proposed action and that the proposed license amendment will not have a significant effect on the quality of the human environment.

The Millstone Unit No. 3 Nuclear Review Board has reviewed and approved this proposed amendment and concurs with the above determinations.

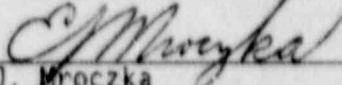
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In accordance with 10CFR50.91(b), NNECO will provide the State of Connecticut with a copy of this proposed amendment via electronic mail to ensure their awareness of this request.

We believe the above information coupled with the information provided in Reference (1) provides a complete basis for approval of the requested amendment. Of course, should the Staff have any additional questions, NNECO will be available to address the Staff's questions.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

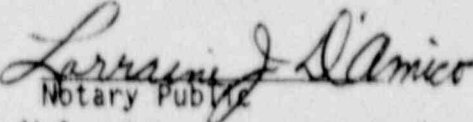

E. J. Mroczka
Senior Vice President

cc: T. T. Martin, Region I Administrator
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

Mr. Kevin McCarthy
Director, Radiation Control Unit
Department of Environmental Protection
Hartford, Connecticut 06116

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Then personally appeared before me, E. J. Mroczka, who being duly sworn, did state that he is Senior Vice President of Northeast Nuclear Energy Company, a Licensee herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Licensee herein, and that the statements contained in said information are true and correct to the best of his knowledge and belief.


Notary Public
My Commission Expires March 31, 1993