

# 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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August 9, 1990

Docket No. 50-336  
B13079

Re: 10CFR50.90

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

Gentlemen:

**Millstone Nuclear Power Station Unit No. 2**  
**Proposed Revision to Technical Specifications**  
**Changes Suggested by Generic Letter 87-09**

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License, DPR-65, by incorporating the changes identified in Attachment 1 into the Technical Specifications of Millstone Unit No. 2. The proposed changes involve no significant hazards considerations.

As part of an initiative to improve industry technical specifications, the NRC Staff issued Generic Letter 87-09, (1) which suggested various changes which could be proposed by licensees to improve the clarity of the technical specifications in certain, specified, areas. The following is an itemization of how the suggested changes from Generic Letter 87-09 have been adapted for Millstone Unit No. 2.

The Staff proposed wording for these Technical Specification changes which has, for the most part, been adopted in the attached proposed changes to the Millstone Unit No. 2 Technical Specifications. NNECO's review of the applicability of Generic Letter 87-09 to the Millstone Unit No. 2 Technical Specifications, however, identified several areas where deviations from the guidance provided in Generic Letter 87-09 are warranted. Although the proposed changes differ from the Staff guidance, they are consistent with the intent of Generic Letter 87-09.

## General Discussion

The primary changes suggested in Generic Letter 87-09 are to Technical Specification Sections 3.0 and 4.0. In addition, due to the changes to Sections 3.0

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

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and 4.0, many of the individual Technical Specifications in Section 3 (Limiting Conditions for Operation) and Section 4 (Surveillance Requirements) also require revision in order to be consistent with the intent of the revised 3.0 and 4.0.

In order to implement the recommendations of Generic Letter 87-09, the NRC Staff provided very specific guidance on what changes were required (e.g., revised wording for T.S. 3.0.4, deletion of certain existing exemptions from T.S. 3.0.4). As a result of NNECO's review of this guidance, several areas were identified where application of this guidance would not be consistent with the intent of Generic Letter 87-09. For example, the changes recommended in Generic Letter 87-09 include revising T.S. 3.0.4 such that entry into an operational mode is permitted while subject to the provisions of an ACTION statement, provided that the applicable ACTION statement would allow continued operation for an unlimited period of time and would not require that the plant be shut down. However, T.S. 3.7.1.2 ACTION statement (c) currently allows indefinite continued operation with all three auxiliary feedwater pumps inoperable. Although this allowance is understandable for power operation, it is inappropriate to allow start-up in this condition. For example, passing through MODE 4 to MODE 3, shutdown cooling is no longer available for decay heat removal. In MODE 3, only the steam generators can be used for decay heat removal. With no auxiliary feed pumps operable, entry into this condition should not be permitted since there would be no safety-related system available for steam generator inventory makeup. This example shows why deviations from Generic Letter 87-09 were required in order to meet the intent of the recommended changes. Other deviations are discussed in the following pages.

#### Proposed Changes to Section 3--Limiting Conditions for Operation

The changes recommended by the Staff in Generic Letter 87-09 would revise T.S. 3.0.4 such that it would allow entry into an operational mode with reliance on one or more ACTION statements provided that conformance to the ACTION statements would allow continued operation for an unlimited period of time. If the ACTION statements would require a plant shutdown within a specified time interval, then entry into a higher operational mode would not be allowed.

A number of Technical Specifications currently contain an exemption from T.S. 3.0.4. The Staff suggested that these specific exemptions be deleted only where the ACTION statement would permit continued operation for an unlimited period of time. Under the Generic Letter 87-09 guidance, where the ACTION statements require a plant shutdown, the exemption from T.S. 3.0.4 would be retained. The concern with retaining exemptions to T.S. 3.0.4 is that in the case where the exemption is retained (i.e., ACTION statement would require shutdown, so start-up should not be permitted), there would be no guidance on whether or not a mode change would be permitted. That is, if T.S. 3.0.4 does not apply, there would be no other Technical Specification which would either preclude or allow start-up.

Please note that the NRC's (and NNECO's) proposed revised wording for T.S. 3.0.4 already provides the necessary guidance for all situations, and the current exemptions from T.S. 3.0.4 in individual specifications can all be deleted regardless of the ACTION requirements. If this is done, T.S. 3.0.4 would always apply. If compliance with the ACTION requirements would allow unlimited continued operation then mode changes would explicitly be allowed. On the other hand, if the ACTION requirements would require a plant shutdown, T.S. 3.0.4 would explicitly prohibit mode changes while still subject to the ACTION statement. This meets exactly the intent of the Staff's recommended changes and eliminates the potential for confusion that could result if an exemption from T.S. 3.0.4 were retained.

The specific changes proposed for the Millstone Unit No. 2 Technical Specifications are summarized below. Note that in several cases due to unique wording of individual specifications, changes other than deletion of the exemption from T.S. 3.0.4 are required to ensure that the intent of the existing ACTION requirement is not affected. Also, various other changes were made to a few affected pages to achieve consistency throughout the Technical Specifications and to correct existing editorial errors.

- T.S. 3.0.3 - This specification is proposed to be changed in part to read:  
"Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time it is identified that a Limiting Condition for Operation is not met." This change is being proposed to be consistent with the wording as contained throughout the proposed specifications for Sections 3.0 and 4.0.
- T.S. 3.0.4 - This specification is proposed to be changed to read: "Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions of the Limiting Condition for Operation are not met and the associated ACTION requires a shutdown if they are not met within a specified time interval. Entry into an OPERATIONAL MODE or other specified condition may be made in accordance with ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements."
- T.S. 3.1.3.3 - delete exemption from 3.0.4
- T.S. 3.3.3.1 - delete exemption from 3.0.4
- T.S. 3.3.3.2 - delete exemption from 3.0.4
- T.S. 3.3.3.3 - delete exemption from 3.0.4



- T.S. 3.3.3.4 - delete exemption from 3.0.4
- T.S. 3.3.3.7 - delete exemption from 3.0.4
- T.S. 3.3.3.8 - delete exemption from 3.0.4
- T.S. 3.3.3.9 - delete exemption from 3.0.4
- T.S. 3.3.3.10 - delete exemption from 3.0.4
- T.S. 3.4.3 - delete exemption from 3.0.4. This will still permit start-up with the PORVs inoperable, block valves closed and power removed, as permitted by the current Technical Specifications.
- T.S. 3.4.8 - delete exemption from 3.0.4. Add a statement to the current ACTION statement (a) that "Entry into an OPERATIONAL MODE or other specified condition is permitted pursuant to Specification 3.0.4 when subject to this ACTION statement." This is necessary to retain the ability to start-up with the primary coolant iodine concentration above the LCO but within the allowable limit, as permitted by the current Technical Specifications.
- T.S. 3.4.9.3 - delete exemption from 3.0.4
- T.S. 3.4.10 - delete exemption from 3.0.4
- T.S. 3.4.11 - delete exemption from 3.0.4
- T.S. 3.6.1.3 - delete exemption from 3.0.4 and replace with the following statement: "Entry into an OPERATIONAL MODE or other specified condition under the provisions of Specification 3.0.4 shall not be made if the inner air lock door is inoperable." This will retain the intent of the current Technical Specification, which allows start-up if the outer air lock door is inoperable.
- T.S. 3.7.1.1 - delete exemption from 3.0.4
- T.S. 3.7.1.2 - add the following to ACTION statement (c): "Entry into an OPERATIONAL MODE or other specified condition under the provisions of Specification 3.0.4 shall not be made with three auxiliary feedwater pumps inoperable." This is necessary so that having three AFW pumps inoperable not requiring a shutdown is not interpreted to mean that start-up in this condition is permitted.
- T.S. 3.7.7.1 - delete exemption from 3.0.4
- T.S. 3.7.9.1 - delete exemption from 3.0.4

T.S. 3.7.9.2 - delete exemption from 3.0.4

T.S. 3.7.9.3 - delete exemption from 3.0.4

T.S. 3.7.10 - delete exemption from 3.0.4

T.S. 3.11.1.2 - delete exemption from 3.0.4

T.S. 3.11.2.2 - delete exemption from 3.0.4

T.S. 3.11.2.3 - delete exemption from 3.0.4

T.S. 3.11.3 - delete exemption from 3.0.4

#### Proposed Changes to Section 4--Surveillance Requirements

The first change suggested by the Staff in Generic Letter 87-09 would revise Specification 4.0.3 to allow a delay of 24 hours before implementation of ACTION requirements after it is identified that a surveillance has not been performed. This would allow time to perform the surveillance to demonstrate equipment operability and compliance with the LCO when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance requirements affecting LCOs with ACTION times greater than 24 hours would not be affected by this change. No changes to individual Technical Specifications are required as a result of this change.

The second change is an addition to T.S. 4.0.4 to permit passage into lower operational modes when required by ACTION requirements without first having to perform the surveillances applicable in the lower modes. The intent is to not delay shutdown of the facility when it is required by T.S. ACTION requirements. Again, no changes are required for individual Technical Specifications other than 4.0.4.

As a part of the Generic Letter 87-09 changes, the Staff also suggests that the exemptions to T.S. 4.0.4 contained in individual Technical Specifications be deleted. These exemptions are currently contained in T.S. 4.2.3.1, 4.2.4.1, 4.2.6.2, and 4.7.1.2. Typically, equipment required by an LCO to be operable in a given mode must have the surveillance requirements performed before entry into that mode is allowed. However, some surveillance requirements cannot be satisfied (e.g., power distribution limits) until the mode is entered. These Technical Specifications are currently exempted from the requirements of T.S. 4.0.4.

Generic Letter 87-09 states that "allowance of an exception to Specification 4.0.4 can create a conflict with Specification 4.0.3" and that "when surveillance requirements can only be completed after entry into a mode or specified condition for which the Surveillance Requirements apply, an exception to the requirements of Specification 4.0.4 is allowed. However, upon entry into this mode or condition, the requirements of Specification 4.0.3 may not be met

because the Surveillance Requirements may not have been performed within the allowed surveillance interval."

NNECO's interpretation of the Technical Specifications is that if an exception is granted to Specification 4.0.4 for an individual surveillance requirement, the normal surveillance interval is applicable. That is, the normal surveillance interval is assumed to start at the time of entry into the mode for which the surveillance is required to be performed. Taking exception to Specification 4.0.4 in a surveillance requirement explicitly permits entry into an operational mode when the applicable surveillances have not been performed within the required surveillance interval. If this is explicitly allowed, we do not see how this can be interpreted as a violation of the Specification 4.0.3 requirement that surveillances be performed within the allowed surveillance interval. If entry into a mode with the surveillance interval exceeded is acceptable, then that same situation should not be a violation of a specification that is applicable only when the mode is entered. An exception to one specification should not automatically be a violation of a different specification.

For example, the surveillance requirements associated with T.S. 3/4 2.3, Total Integrated Radial Peaking Factor, contains an exemption to 4.0.4. Thus, the surveillance requirements for this LCO are required to be performed only at the frequency required by 4.2.3.2. Typically this would be once every 31 days of Mode 1 operation or prior to reaching 70% power after refueling. Time spent in lower modes of operation where the specification does not apply is not part of the required surveillance interval. Using the Staff's interpretation, only the 24-hour "grace" period allowed by the revised 4.0.3 would be available to complete all required surveillances before determining that the LCO has not been met and applying the ACTION requirements. Depending on plant conditions during start-up and rate of power ascension, etc., 24 hours is not adequate to perform reliable surveillances on power distribution limits. Since we currently do not see any conflict between 4.0.3 and 4.0.4 due to the exceptions granted to 4.0.4, it is requested that these exceptions be retained.

The affected Technical Specifications and the proposed changes are identified below:

- T.S. 4.0.3 - revised to read "Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance requirements do not have to be performed on inoperable equipment."



- T.S. 4.0.4 - add the following sentence to the end: "This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements."

#### Proposed Changes to Bases

Several deviations are recommended from the bases provided in Generic Letter 87-09. These are:

- Specification 3.0.3 - delete sentence which states that "one hour is allowed to prepare for an orderly shutdown before initiating a change in plant operation." The exact timing of power reductions, shutdown, etc., should be at the discretion of the operator, so long as the time limits of T.S. 3.0.3 are met. This sentence could be interpreted as an additional Technical Specification requirement.
- revise the next to last sentence at the bottom of page B3/4 0-2 for consistency with remainder of Sections 3.0 and 4.0.
- Specification 4.0.3 - delete the last portion of the first paragraph on page B3/4 0-5 regarding enforcement action and the reporting requirements. This is inconsistent with the purpose of the Bases.
- delete the sentence in the middle paragraph of page B3/4 0-5 discussing the applicability of the 24 hour "grace" period for surveillances which are exempted from T.S. 4.0.4, as this is inconsistent with how NNECO interprets these requirements (see earlier discussion).

#### Significant Hazards Consideration

NNECO has reviewed the specific proposed changes to Sections 3.0 and 4.0 of the Technical Specifications in accordance with 10CFR50.92 and has concluded that the changes do not involve a significant hazards consideration. NNECO's analysis pursuant to 10CFR50.92 specifically addressed the changes as proposed, using current Technical Specifications (rather than the text suggested in Generic Letter 87-09) as the benchmark.

NNECO concludes that the proposed changes to Sections 3.0 and 4.0 do not:

1. Involve a significant increase in the probability or consequences of any accident previously analyzed.

- a. Section 3.0: The current Technical Specification 3.0.4 prohibits changing mode of operation unless all Limiting Conditions for Operation (LCOs) are met. Certain Technical Specifications, however, contain an exemption to Technical Specification 3.0.4 that allows start-up with equipment or parameters that are not in compliance with an applicable LCO. This exemption typically is provided for that equipment covered by Technical Specifications that is not necessary to adequately mitigate design basis accidents. In these cases, because equipment operability does not impact the design basis, there is no need for a restriction on plant start-up. In all of these cases except one (Technical Specification 3.4.8), the ACTION statements allow continued operation for an indefinite period. (Technical Specification 3.4.8 provides an exemption so that a posttrip iodine spike will not preclude restart.)

The proposed revision to Technical Specification 3.0.4 would specifically allow entry into an operational mode while subject to ACTION requirements, provided those requirements allow indefinite continued operation. The revised Technical Specification 3.0.4 is thus consistent with the concept and intent of the current Technical Specifications; the numerous exemptions from Technical Specification 3.0.4 would no longer be necessary or appropriate. As such, the proposed changes will not increase the probability or consequences of any accident previously analyzed.

Several other current Technical Specifications in Section 3.0 (3.4.3., 3.4.8, 3.6.1.3, and 3.7.1.2) contain limited exemptions from the current Technical Specification 3.0.4 that cannot be simply deleted as a result of the proposed revision to Technical Specification 3.0.4. NNECO has therefore proposed revisions to these that are consistent with the intent of Generic Letter 87-09 and that ensure the intent and function of the Technical Specifications do not change. Therefore, these proposed changes as well as the various editorial changes will also not impact the probability or consequences of accidents previously analyzed.

Finally, the proposed changes to Technical Specification 3.0.4 also impact other individual Technical Specifications which do not currently contain an exemption from T.S. 3.0.4 (e.g., Technical Specification 3.6.3.1, which permits indefinite continued operation with an inoperable containment isolation valve provided the penetration is isolated by a deactivated valve). In these cases, the proposed revisions to Technical Specification 3.0.4 would allow start-up because the applicable ACTION requirements allow indefinite continued operation. However, this minor change is consistent with the objective of Generic Letter 87-09 and the intent of the other proposed revisions, i.e., to allow mode changes when subject to ACTION requirements that do not impact continued operation. In these cases, the ACTION requirements provide an equivalent level of safety



without requiring a shutdown. Allowing start-up in these situations will therefore have no adverse impact on the probability or consequences of any accident previously analyzed.

- b. Section 4.0: The proposed change would revise Technical Specification 4.0.4 to allow a delay of up to 24 hours to implement ACTION requirements in the event a required surveillance was not performed and the allowable outage time limits of the ACTION statement are less than 24 hours. This delay would apply only in the event of a missed surveillance; it would not apply to a failed surveillance.

The proposed delay in implementing the ACTION requirements is intended to allow sufficient time to complete the required surveillance. The proposal recognizes that a missed surveillance is much less significant than a failed surveillance. Further, given that the vast majority of surveillances performed meet relevant acceptance criteria, in most cases the missed surveillance -- once completed -- will demonstrate the equipment to be operable. The proposed change recognizes that it is overly conservative to assume that equipment is inoperable simply because a surveillance was missed.

This proposed change to Technical Specification 4.0.4 does not impact the integrity of any component or of the reactor coolant pressure boundary. The proposed change does not impact, in a substantive way, the operability or surveillance requirements for any component, nor does it change the way surveillance/testing is performed. NNECO therefore concludes that the change will not increase the probability or consequences of any accident previously analyzed.

The proposed change to Technical Specification 4.0.4 is essentially a clarification of existing Technical Specifications. As such, this change will also have no effect on the probability or consequences of accidents previously analyzed.

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

None of the proposed changes to either Section 3.0 or Section 4.0 of the Technical Specifications or the proposed editorial changes will have any impact on plant response. The amendments requested also involve no changes to plant equipment or to either normal or emergency operating procedures. Thus, no new failure modes will be introduced.

In addition, all of the equipment affected by the change to Technical Specification 3.0.4 is either not required for mitigation of a design basis accident or the applicable Technical Specification

ACTION statement provides an equivalent level of safety. Thus, plant response will be unaffected.

In summary, NNECO concludes that the proposed changes will not create the possibility of any new or different kind of accident from those previously analyzed.

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

As discussed above, none of the proposed changes to either Section 3.0 or Section 4.0 of the Technical Specifications or the editorial changes will impact plant equipment, plant response, or any parameter related to the integrity of the reactor coolant pressure boundary. Further, the proposed changes will not affect either normal or emergency operating procedures. Therefore, the proposed changes will not impact any safety limit or reduce any margin of safety.

Moreover, the Commission has provided guidance concerning the application of standards in 10CFR50.92 by providing certain examples (March 6, 1986, FR7751) of amendments that are considered not likely to involve a significant hazards consideration. The changes proposed herein are not enveloped by a specific example.

The proposed changes were suggested, for the most part, by the NRC Staff via Generic Letter 87-09, to clarify and improve the Technical Specifications; they affect no parameters or systems directly, are associated with no failure modes, do not affect operation of the plant, and do not change the intent of the Technical Specifications. Therefore, the proposed changes involve no significant hazards consideration.

The Millstone Unit No. 2 Nuclear Review Board has reviewed and approved the attached proposed revisions and has concurred with the above determinations.

The improvements suggested by the NRC Staff in Generic Letter 87-09 have been incorporated into the Technical Specifications of the Haddam Neck Plant. This was issued as Amendment No. 125, dated April 26, 1990, as part of their conversion to Standard Technical Specifications.

The proposed change is not required to support continued operation. Therefore, NNECO requests the effective date for the proposed change be 60 days after issuance by the NRC Staff. This will provide adequate time for changes to controlled documents and any applicable training of operational personnel.

Regulatory Commission

Re with 10CFR50.91(b), we are providing the State of Connecticut  
of this proposed amendment.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

*M. M. M. M.*  
President



U.S. Nuclear Regulatory Commission  
B13079/Page 11  
August 9, 1990

In accordance with 10CFR50.91(b), we are providing the State of Connecticut with a copy of this proposed amendment.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka  
Senior Vice President

cc: T. T. Martin, Region I Administrator  
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2  
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3  
P. Habighorst, Resident Inspector, Millstone Unit No. 2

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

STATE OF CONNECTICUT)  
COUNTY OF HARTFORD ) ss. Berlin

Then personally appeared before me, E. J. Mroccka, 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.

*Lorraine J. Samico*  
Notary Public  
My Commission Expires March 31, 1993