



Northeast
Utilities System

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Northeast Utilities Service Company
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October 6, 1995

Docket No. 50-336
B15380

Re: 10CFR50.90
10CFR50.91

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

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Cycle-Specific A.C. Sources Allowed Outage Time Extension

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License, DPR-65, for Millstone Unit No. 2 by incorporating the attached Technical Specification revision to Section 3.8.1.1, "Electric Power Systems, A.C. Sources, Operating," and the Bases for Section 3/4.8, "Electrical Power Systems."

The proposed amendment will extend the Allowed Outage Time (AOT) when one offsite circuit (specifically, the Millstone Unit No. 2 electrical cross-tie from Millstone Unit No. 1) is inoperable from the current 72 hours to seven days. This change is needed to avert a Millstone Unit No. 2 shutdown when offsite power obtained from Millstone Unit No. 1 becomes unavailable for more than 72 hours when maintenance is performed on the Millstone Unit No. 1 Reserve Station Service Transformer (RSST) and cross-tie 14H bus during the upcoming Millstone Unit No. 1 outage. In the past, the operability of the cross-tie from Millstone Unit No. 1 was not recognized as a limiting condition for operation of Millstone Unit No. 2. This historical oversight will be documented in a Licensee Event Report.

The Millstone Unit No. 1 outage is currently scheduled to begin October 27, 1995, and work on the relevant electrical cross-tie equipment is scheduled to start on or about November 5, 1995. The estimated completion time for this maintenance activity is 52 hours. However, the potential exists for the maintenance activity to exceed the current 72 hours limiting condition for operation for Millstone Unit No. 2. Therefore, NNECO is requesting a license amendment change to extend the AOT beyond the present 72 hour limit.

In addition, NNECO requests that the NRC Staff process this license

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amendment request on an exigent basis pursuant to 10CFR50.91(a)(6). NNECO believes that expedited treatment for this license amendment is warranted in this case to avoid an unnecessary shutdown of Millstone Unit No. 2. NNECO has determined that this request does not involve any significant safety impact or a significant hazards consideration (SHC). Thus, the operational risk associated with the request has no significant impact on public health and safety.

NNECO has performed a Probabilistic Safety Analysis to justify the AOT extension. This analysis evaluates the additional risk incurred for the additional four (4) days that the cross-tie from Millstone Unit No. 1 may be unavailable. The results of the analysis confirm that the risk increase due to the AOT extension is negligible.

The proposed change will only apply for the remainder of the Millstone Unit No. 2 Cycle 13. NNECO intends to evaluate the best long-term solution for this issue including providing another offsite power source for Millstone Unit No. 2 that would allow Millstone Unit No. 1 to perform maintenance on the electrical cross-tie equipment without affecting the ability of Millstone Unit No. 2 to continue power operation. This effort and any needed corrective action, however, cannot be completed before the Millstone Unit No. 1 outage.

NNECO will also evaluate specific compensatory actions necessary to limit the risk effect of the AOT extension. This evaluation will be performed as part of the Millstone Unit No. 2 on-line risk pilot program and will specify appropriate compensatory measures.

Attachment 1 to this letter provides the Safety Assessment for the proposed change. Attachment 2 is the determination of no significant hazards considerations. Attachment 3 is a copy of the marked-up version of the appropriate section of the current Technical Specifications. Attachment 4 is the retyped Technical Specification section.

NNECO has reviewed the proposed Technical Specification changes in accordance with 10CFR50.92 and concludes that the changes do not involve a significant hazards consideration. NNECO has also reviewed the proposed license amendment against the criteria of 10CFR51.22 for environmental considerations and concludes that the changes do not increase the types and amounts of effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Thus, NNECO concludes that the proposal satisfies 10CFR51.22(c)(9) for categorical exclusion from the requirements for an environmental impact statement.

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The Nuclear Safety Assessment Board concurs with the above determinations. In accordance with 10CFR50.91(b), NNECO is providing the State of Connecticut with a copy of this proposed license amendment.

In summary, NNECO is requesting an exigent license amendment that would allow the plant to modify Technical Specifications 3.8.1.1 and its Bases. This change will allow the unit to continue to operate in the event that the electrical cross-tie from Millstone Unit No. 1 is unavailable for more than 72 hours. NNECO requests that the NRC Staff process and issue this proposed amendment prior to November 5, 1995, to be effective upon issuance.

We acknowledge and apologize for the short time available to process this request on an exigent basis. We also wish to emphasize our conclusion that this proposed amendment does not involve any undue safety risk and that we will make prudent efforts to reduce the time that the electrical cross-tie equipment from Millstone Unit No.1 is unavailable.

The following are NNECO's commitments made within this letter. Other statements within this letter are provided for information only.

B15380.1 NNECO has evaluated the effect of removing the electrical cross-tie to Millstone Unit No. 1 for a period of seven days and shall, as part of the on-line risk pilot program, implement appropriate compensatory measures to limit the overall risk, such as maximizing the availability of the diesel generators or the auxiliary feedwater system.

B15380.2 NNECO shall perform a study to evaluate potential long term solutions to this issue. This study will specifically evaluate the need for and cost-benefit associated with securing another offsite power source for Millstone Unit No. 2.

In view of the emergent nature of this request, we will promptly provide any additional information the NRC Staff may need to

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respond to this request. If there are any questions regarding this
submittal, please contact Mr. Mario Robles at (203) 440-2073.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: J. F. Opeka
Executive Vice President

BY: *E. A. DeBarba*
E. A. DeBarba
Vice President

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

Mr. Kevin T.A. McCarthy, Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Subscribed and sworn to before me
this 6th day of October, 1995
Geraud van Noordennen
Date Commission Expires: 12/31/97

Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Cycle-Specific A.C. Sources Allowed Outage Time Extension

Safety Assessment of Proposed Changes

October 1995

**Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Cycle-Specific A.C. Sources Allowed Outage Time Extension
Safety Assessment of Proposed Changes**

Background

On September 6, 1995, the Millstone Unit No. 2 Plant Operations Review Committee approved a Technical Specification clarification that clearly identified the requirements for offsite power during Millstone Unit No. 2 power operation. The Technical Specifications requires two independent and redundant offsite power sources be available at power. Consistent with the Final Safety Analysis Report, the clarification specifically identified that these two independent sources be:

- (1) the 345kV transmission lines to the Millstone Unit No. 2 Reserve Station Service Transformer (RSST) (the "preferred" source)

and

- (2) the Millstone Unit No. 1 RSST via the 14H bus (the "alternate" source).

If one of the above offsite power sources is unavailable, Millstone Unit No. 2 must enter a 72-hour Technical Specifications Action Statement. That is, if the unavailable offsite power source is not restored within 72 hours, Millstone Unit No. 2 would have to begin a shutdown.

A review of work planned for the upcoming Millstone Unit No. 1 outage revealed that maintenance on the Millstone Unit No. 1 RSST and bus 14H could take more than 72 hours to perform. Thus, a Millstone Unit No. 2 shutdown would commence if the Millstone Unit No. 1 electrical cross-tie equipment was unavailable for more than 72 hours.

In view of this situation, NNECO has developed a short and long-range action plan. The short-range plan is designed to keep Millstone Unit No. 2 operating during the Millstone Unit No. 1 outage and involves reducing the time bus 14H is inoperable as well as this proposed license amendment. The long-range plan will be finalized by April 15, 1996, and will resolve this issue on a permanent basis.

Description of Proposed Change

The proposed change extends the AOT for an inoperable offsite circuit (specifically, the Unit 2 electrical cross-tie from Millstone Unit 1) from the existing limit of 72 hours to seven days. Additionally, the proposed change revises the Bases section for the electrical power system to provide the justification for the change.

Safety Assessment

Northeast Nuclear Energy Company (NNECO) has performed an integrated review and assessment of the design basis, plant operations, and plant risk for the AOT extension for the offsite circuit. The proposed AOT extension of the offsite circuit was evaluated using Probabilistic Safety Analysis (PSA) techniques.

The analysis recognized that when the bus 14H cross-tie is unavailable, the Core Damage Frequency (CDF) during power operation increases. The CDF increase is determined to be approximately 3×10^{-6} /year. If the plant operates at this elevated CDF (about 10 percent higher than the average Millstone Unit No. 2 CDF of 3.4×10^{-5} /year) for a period of seven days, the added core damage probability (CDP) is approximately 6×10^{-8} . This is acceptable in comparison to the CDPs associated with most Technical Specifications that recognize operational constraints. NNECO also performed a bounding analysis for a 14 day AOT. The value for a 14 day AOT is 1.2×10^{-7} , which is also acceptable.

In addition, there is a finite risk associated with plant evolutions that include a shutdown and a startup. The best estimate of the CDP associated with transition is approximately 9×10^{-8} . Both the transition risk and the CDP associated with performing the on-line 14H work is small and comparable in magnitude and will offset each other. Therefore, it is concluded that extending the AOT has minimal impact on public health and safety.

The increase in risk will be kept at minimal levels by minimizing the total number of hours that an offsite circuit is taken out of service. Millstone Unit No. 1 management is aware of this issue and will endeavor to complete scheduled maintenance on the electrical cross-tie equipment as quickly as possible, by providing two shift coverage for this work during the outage.

In addition, Millstone Unit No. 2 will identify and implement

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appropriate compensatory actions consistent with our on-line maintenance risk monitor pilot program to reduce the overall risk when the Millstone Unit No. 1 cross-tie is unavailable.

In summary, the proposed change is safe and will provide an adequate margin of safety.

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Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
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Determination of No Significant Hazards Consideration

October 1995

**Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Cycle-Specific A.C. Sources Allowed Outage Time Extension
Determination of No Significant Hazards Consideration**

Pursuant to 10CFR50.92, Northeast Nuclear Energy Company (NNECO) has reviewed the proposed changes to extend the Allowed Outage Time (AOT) for an inoperable offsite circuit from the existing limit of 72 hours to seven days. NNECO concludes that these changes do not involve a significant hazards consideration since the proposed changes satisfy the criteria in 10CFR50.92(c). That is, the proposed changes do not:

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

The offsite circuits emergency power system includes equipment required to support the safe shutdown and post-accident operations of Millstone Unit No. 2. The preferred off-site power supply is from the 345-kV switchyard, through the reserve station service transformer. The alternate source of off-site power is the 4160V tie to Millstone Unit No. 1 via bus 14H. These offsite circuits are not accident initiators. Therefore, this change does not involve an increase in the probability of any accident previously evaluated.

Although the offsite circuits provide power to components that help mitigate the consequences of accidents previously evaluated, the extension in the AOT does not affect any of the assumptions used in the deterministic evaluations of these accidents. Thus, this change will not increase the consequences of any accident previously analyzed.

A PRA analysis was performed to determine the impact on safety. That analysis examined the increase in core damage frequency (CDF) and the core damage probability and concluded that the impact is negligible. Further, the extended AOT, by itself, does not necessarily increase risk. The increase in the risk depends on the total time during which an offsite circuit (specifically, the Millstone Unit No. 2 electrical cross-tie from Millstone Unit No. 1) is unavailable and the other equipment that is concurrently out of service. The total risk increase due to the offsite circuit being out-of-service will not be significant since that risk increase is monitored and kept at acceptable levels in accordance with the risk monitor program.

Based on the above, the proposal to extend the AOT for one offsite circuits does not involve a significant increase in the probability or consequences of an accident previously analyzed.

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

The proposed change to extend the AOT for one offsite circuit does not alter the physical design, configuration, or method of operation of the plant. Therefore, the proposal does not create the possibility of a new or different kind of accident from any previously analyzed.

Involve a significant reduction in the margin of safety.

The proposed change to extend the AOT for one offsite circuit inoperable does not affect the Limiting Conditions for Operation or their bases. As a result, the deterministic analyses performed to establish the margin of safety are unaffected. Thus, the change does not involve a significant reduction in the margin of safety.

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Attachment 3

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Marked-up Pages

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