

Northeast
Utilities System

107 Selden Street, Berlin, CT 06037

Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
(203) 665-5000

August 23, 1995

Docket No. 50-336
B15332

Re: 10CFR50.90

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

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Diesel Generator 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 Specifications revision to Section 3.8.1.1 and the Bases for Section 3/4.8.

The proposed amendment will extend the Allowed Outage Time (AOT) for an Emergency Diesel Generator (EDG) from 72 hours to seven (7) days. This change is part of a joint Combustion Engineering Owners Group (CEOG) effort to obtain flexibility in the performance of corrective and preventive maintenance during power operation. The CEOG has prepared a report which details the methodology used to justify the AOT extension for the EDGs during corrective maintenance. A copy of this CEOG report (CE NPSD-996, "Joint Applications Report for Emergency Diesel Generators AOT Extension," April 1995) is forwarded with this letter. The risk increase due to the AOT extension for performance of preventive maintenance on the EDG is monitored and kept at acceptable levels by our Risk Monitor program.

Attachment 1 to this letter provides a Safety Assessment of 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

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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.

The Millstone Unit No. 2 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.

This request is considered a Cost Beneficial Licensing Action (CBLA) by NNECO. The extension of the AOT for the EDG from 72 hours to seven (7) days is anticipated to save more than the \$100,000 guideline identified by the Staff without negatively affecting public health and safety.


Regarding the proposed schedule for this amendment, we request issuance at your earliest convenience and implementation within 60 days of issuance.

Additionally, this request is part of a combined CEQG effort, enabling a single NRC technical review of similar technical specification changes for several CEQG plants. Accordingly, this request should be reviewed as part of that effort. 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
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

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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 23rd day of August, 1995

P. J. Miner

Date Commission Expires: 6/30/2000

PETER J. MINER
NOTARY PUBLIC
MY COMMISSION EXPIRES JUNE 30, 2000

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Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Diesel Generator Allowed Outage Time Extension
Safety Assessment of Proposed Changes

August 1995

**Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Diesel Generator Allowed Outage Time Extension
Safety Assessment of Proposed Changes**

Background

Millstone Unit No. 2 is equipped with two seismically qualified EDGs that supply backup power to the vital 4160 volt and 480 volt busses in the event of a Loss of Normal (offsite) Power. During power operation, the operability of the Emergency Diesel Generators (EDG) help to ensure that sufficient power will be available to safety-related equipment which is needed for the safe shutdown of the facility and for mitigation and control during accident conditions. During shutdown and refueling conditions, the EDG operability helps to ensure that the facility is maintained shutdown or in a refueling condition for an extended period of time.

Description of Proposed Change

The proposed change extends the Allowed Outage Time (AOT) for an inoperable EDG from the existing limit of 72 hours to seven (7) days. Additionally, the proposed change revises the Bases section for the electrical power system to provide the justification for the change.

Extending the AOT for the EDG has several potential benefits. Among the potential benefits are:

- *Averted unplanned plant shutdown(s).* Risks incurred by unexpected plant shutdowns are comparable to and sometimes greater than those associated with continued plant operation while corrective maintenance is performed.
- *Increased flexibility in scheduling and enhanced performance of preventive maintenance.* During preventive maintenance outages, personnel and plant resources are typically spread across a large number and wide variety of maintenance tasks. The ability to perform on-line preventive EDG maintenance provides additional schedular and personnel options to focus the best resources on required or elected EDG maintenance.

- *Reduced number of entries into Limiting Condition of Operation (LCO) action statements.* By providing sufficient time to perform related on-line corrective or preventive maintenance tasks, the likelihood of entering a required action is diminished.

Safety Assessment

The Combustion Engineering Owners Group (CEOG) performed an integrated review and assessment of the design basis, plant operations, and plant risk for the AOT extension for the EDGs for corrective maintenance; that is, cases where the AOT represents a "time window" to effect repairs before shutdown would be required. The proposed AOT extension of the EDGs were evaluated using Probabilistic Safety Analysis (PSA) techniques.

The methodology and results used for Millstone Unit No. 2 are detailed in CE NPSD-996, "Joint Applications Report for Emergency Diesel Generators AOT Extension," April 1995. This report recognizes that when an EDG is unavailable, due either to being declared inoperable (by failing a surveillance requirement) or is intentionally taken out-of-service (for preventive maintenance), the Core Damage Frequency (CDF) during power operation does increase.

In cases where a corrective maintenance activity could potentially exceed the current 72 hour AOT, the increase in CDF is significantly offset by the averted risks from mode transition during operation when the plant is shutdown. The transition risk refers to the increase in the CDF when the plant is "transitioning" to a lower mode of operation. This risk is dominated by the probability that main feedwater may be inadvertently lost during the transition to lower power levels.

For cases of preventive maintenance, the increase in risk is kept at minimal levels by minimizing the total number of hours that an EDG is intentionally taken out of service during a given year and by ensuring that other risk significant components are not concurrently taken out of service. The total risk increase due to the EDG 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.

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

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Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Diesel Generator Allowed Outage Time Extension
Determination of No Significant Hazards Consideration

August 1995

**Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Diesel Generator Allowed Outage Time Extension
Determination of No Significant Hazards Consideration**

Pursuant to 10CFR50.92, NNECO has reviewed the proposed changes to extend the Allowed Outage Time (AOT) for an inoperable emergency diesel generator (EDG) from the existing limit of 72 hours to seven (7) days. NNECO concludes that these changes do not involve a significant hazards consideration since the proposed change satisfies 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 EDGs supply backup power to the essential safety systems in the event of a Loss of Normal (offsite) Power. EDGs are not accident initiators. Therefore, this change does not involve an increase in the probability of any accident previously evaluated.

Although the EDGs provide backup 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.

The increase in the EDG AOT introduces the potential to increase the risk to the public since a longer time window provides an opportunity to perform additional preventive maintenance to the EDG while the plant is on-line. However, the extended AOT, by itself, does not necessarily increase risk. The increase in the risk depends on the total time during which an EDG was out of service and the other equipment that is concurrently out of service with the EDG. The total risk increase due to the EDG 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 the EDGs (Technical Specification 3.8.1) does not involve a significant increase in the probability or consequences of an accident previously analyzed.

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

The proposed change to extend the AOT for the EDGs (Technical Specification 3.8.1) 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.

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

The proposed change to extend the AOT for the EDGs (Technical Specification 3.8.1) do not affect the Limiting Conditions for Operations 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

Millstone Nuclear Power Station, Unit No. 2

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Marked-up Pages

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