

**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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December 22, 1986

Docket No. 50-336  
B12368

Office of Nuclear Reactor Regulation  
Attn: Mr. Ashok C. Thadani, Director  
PWR Project Directorate #8  
Division of PWR Licensing - B  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2  
Proposed Amendment to Facility Operating License  
Extension of Facility Operating License

Pursuant to 10 CFR 50.51, 50.90 and 50.92, Northeast Nuclear Energy Company (NNECO) hereby requests an amendment to Operating License DPR-65 to extend the duration of the license to forty (40) years from the date of issuance of the operating license.

Operating License DPR-65 presently expires December 11, 2010, forty years from the date of issuance of the construction permit for Millstone Unit No. 2. NNECO requests that Operating License DPR-65 be amended to expire at midnight July 31, 2015, forty years from its August 1, 1975 issuance, as shown in Attachment 1.

DISCUSSION

Regulatory Requirements

Section 103(c) of the Atomic Energy Act, as amended, provides that the Commission shall issue licenses for a specified period, "but not exceeding forty years" (42 USC 2133(c)). The Commission implemented this statutory provision in 10 CFR 50.51, similarly providing that a license be issued for a fixed period, not exceeding 40 years. The Commission originally considered that, for operating licenses, the period commenced with the issuance of the construction permit. Accordingly, the full-term operating license for Millstone Unit No. 2 presently expires December 11, 2010, forty (40) years after issuance of the construction permit for the plant. However, the Commission has since determined that the forty (40) year license term may commence with the issuance of the operating license. Accordingly, the Commission has accepted and approved requests to amend existing operating licenses to extend their expiration dates. NNECO requests herein an amendment for the Millstone Unit No. 2 operating license consistent with previous Commission practice regarding other plant operating license dockets.

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### Safety and Environmental Impacts

Millstone Unit No. 2 systems, structures and components are designed so as to permit operation for a full forty (40) year license term. NNECO's analysis of the safety impacts associated with this extension demonstrates that no adverse safety consequences will result from this extension. NNECO also addressed the environmental impacts of the requested extension and found that the impacts associated with an additional period of operation have either previously been evaluated or are insignificant. In any event, these impacts are far outweighed by the incremental benefits which accrue as a consequence of the additional period of operation.

#### Safety Evaluation

The safety evaluation conducted by NNECO in conjunction with this request is described in Attachment 2 hereto. The evaluation addresses potential impacts on both electrical and mechanical equipment, concluding that both classes of equipment are qualified for operation during the term of the extension. This does not mean, of course, that some equipment may not wear out during normal operation. However, appropriate inspection, maintenance and surveillance practices, facilitated by design features provided for such purposes, provide assurance that any unexpected degradation of plant equipment will be detected and corrected in a timely manner. NNECO also evaluated potential implications for the facility structures, the reactor pressure vessel and plant systems resulting from the additional period of operation and found no adverse consequences. In short, this extension has no significant impact on the Millstone Unit No. 2 safety analyses, including those evaluated by the Commission Staff in their Safety Evaluation Report, as supplemented.

#### Environmental Assessment

NNECO's evaluation of environmental impacts, also described in Attachment 2, demonstrates that no significant environmental impacts, either radiological or otherwise, result from the extended period of operation. NNECO considered radiological implications resulting from plant operation both for the general public and as a result of occupational exposures. Fuel cycle impacts were also considered. As demonstrated therein, such impacts as will result have already been considered in prior licensing reviews or are insignificant, and are, in any event, far outweighed by the benefits which accrue to the consumers as a result of the extended period of operation. The benefits associated with the extended period of operation include direct benefits in the form of deferred costs from extended baseload generating capacity, and benefits of tax revenues and community employment.

#### Unreviewed Safety Question

This proposed amendment has been reviewed by the NNECO Plant Operations Review Committee and the Nuclear Review Board. These groups have concluded

that the proposed change does not constitute an unreviewed safety question under 10 CFR 50.59 because the amendment simply provides for operation in the same manner presently authorized over an additional period of time. There will be no changes to operating parameters, reactor structures, systems, components, or Technical Specifications. In addition, the potential effects of the proposed license extension are already within the original design considerations for the facility. Further, current surveillance, inspection, testing and maintenance practices provide assurance that unforeseen degradation in plant equipment will be identified and corrected throughout the lifetime of the facility. Consequently, NNECO concludes as follows:

1. Neither the probability of occurrence<sup>(1)</sup> nor the consequences of an accident or malfunction of equipment important to safety previously evaluated would be increased by this amendment.
2. The possibility for an accident or malfunction of a type different than previously evaluated will not be created.
3. No margin of safety as defined in the basis for Technical Specifications will be reduced.

In summary, no unreviewed safety question is presented by this amendment in that neither the reactor nor its operation need be modified.

#### No Significant Hazards Consideration

The proposed revision also does not constitute a significant hazards consideration as defined by 10 CFR 50.92. Rather, the proposed revision to the Millstone Unit No. 2 operating license only contemplates an extension to expiration dates for the current license. It does not involve any changes in the design or operation of the station. In particular, the proposed change does not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated because no changes to the design or operation of the station are involved. Thus, no changes to the facility or operating conditions will be made that could alter postulated scenarios regarding accident initiation or response. Further, the amendment does not require any changes to safety analyses (although an evaluation was performed to confirm that existing evaluations bound the potential effects of 40-year operation). Also, no modifications to facility procedures or Technical Specifications are necessary. Finally, existing surveillance, inspection, testing and maintenance practices provide assurance that degradation in plant equipment, structures or components will be identified and corrected as necessary throughout the lifetime of the facility. In summary, the potential effects of the extended period of operation are encompassed within original design considerations.

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(1) The probability of occurrence for this evaluation is defined as the probability per reactor-year of operation.



2. Create the possibility of a new or different kind of accident from any accident previously evaluated because no changes are necessary to the design or operation of the facility (see discussion in item 1).
3. Involve a significant reduction in a margin of safety because no changes to the design and operation of the facility and no changes to existing safety analyses are necessary. Further, no revisions to procedures or Technical Specifications are required. And, as noted, assurance that degradation of equipment, structures or components will be identified and corrected throughout the lifetime of the facility is provided by existing surveillance, inspection, testing and maintenance practices.

In summary, the proposed amendment does not constitute a significant hazards consideration. NNECO's evaluation has shown that structures, systems and components at Millstone Unit No. 2 will continue to perform within the limits of existing design and operational criteria throughout the requested additional period of operation. Further, existing measures provide assurance that unexpected degradation of structures, systems and components will be detected and corrected in a timely manner. Thus, no new safety implications are presented by the requested amendment. Existing measures to assure the protection of the public health and safety will continue to provide such assurance during the extended period of operation.

#### No Significant Environmental Impact

As noted above and described in Attachment 2, there are no new significant radiological or nonradiological impacts associated with the proposed action. The issuance of the requested amendment will have no significant adverse impact on the quality of the human environment and will, in fact, provide a benefit to consumers.

#### CONCLUSION

For the above reasons, the NRC is requested to approve this application to amend the Millstone Unit No. 2 operating license for the full 40-year license term. NNECO is, of course, prepared to meet with the Staff at its convenience to discuss this application if necessary.

#### Application Fee

Pursuant to 10CFR170.12(c) and 170.21, NNECO encloses herewith a check for \$150.00 to cover the fee for processing this request.

*Jennifer L. Powers*  
Notary Public  
My Commission Expires March 31, 2009