



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

ENVIRONMENTAL IMPACT APPRAISAL

BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

DESCRIPTION OF PROPOSED ACTION

By letter dated December 15, 1978, Northeast Nuclear Energy Company (NNECO or the licensee) requested an amendment to Facility Operating License No. DPR-65 to allow operation of Millstone Nuclear Power Station, Unit No. 2 (Millstone-2) at an increased power rating of 2700 Mwt. This application contains the licensee's Environmental Impact Assessment of operation at the 2700 Mwt power level.

The licensee is presently licensed to operate Millstone-2 at a maximum power level of 2560 Mwt. The proposed change will increase the thermal power level by 5.5%. The licensee estimates that the additional electric output of approximately 40 MWe represents a potential savings to customers over the course of Cycle 3 operation, approaching \$6 million.

The Millstone Station is located on the north shore of Long Island Sound and on the east side of Niantic Bay in the town of Waterford, Connecticut, about three miles from New London, Connecticut.

The purpose of this Environmental Impact Appraisal (EIA) is to document our findings regarding the need to prepare a Final Environmental Statement (FES) in accordance with 10 CFR 51 Parts 51.5 and 51.7.

ENVIRONMENTAL IMPACT OF PROPOSED ACTION

In the preparation of the FES related to the continuation of construction of Millstone-2 and the operation of Units Nos. 1 and 2, the NRC staff performed the entire review based on the Unit No. 2 ultimate power level of 2700 Mwt. This FES was issued in June 1973. In the February 1974 FES related to the proposed construction of Millstone Unit No. 3, Unit No. 2 was again assumed to operate at the 2700 Mwt power level.

In their December 15, 1978 submittal, NNECO provides an update of the environmental impact assessment. Our appraisal of this information follows.

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### Introduction

NNECO reports that the plant description is unchanged except for the change in thermal power level from 2560 Mwt to 2700 Mwt. As previously mentioned the FES states, "When completed, Unit No. 2 will generate 830 MWe (2700 Mwt)."

By letter dated May 21, 1979, the licensee informed us that the radwaste evaporator is unservicable and will not be replaced. The radwaste system is under review as a part of the Appendix I review by the NRC staff. The question of the replacement of the radwaste evaporator will be addressed as a portion of this review.

### The Site

NNECO provides information to update the site description, site meteorology and site ecology. They find that the historical significance, geology and hydrology of the site have not changed. We find no significant changes in the population, land use, meteorology, geology, hydrology and ecology which would affect our previous conclusion documented in our FES of June 1973.

### The Station (Unit No. 2 Portion)

NNECO states that no changes in the description of the reactor and steam-electric system, other than the thermal power level and electrical output increases, are necessary. We find that the power level increase will have no appreciable effect on the station systems except for the condenser circulating water temperature increase as addressed below.

### Environmental Effects of Plant Operation

NNECO provided information on their environmental radiological monitoring programs including preoperational, early operative and present operational versions. We have reviewed these monitoring programs and find that appropriate attention has been given to radiological monitoring. The present operational program should detect any environmental effect due to the power level increase. We expect such effects to be negligible.

NNECO estimates that the 5.5% power level increase will result in an additional 0.8°F temperature rise across the condenser. Past data indicates that this 0.8°F rise across the condenser will not bring the average delta temperature to the 23°F value assumed in our June 1973 FES. The present Appendix B (Environmental) Technical Specifications limit the condenser delta temperature to 28°F. This limit will not be increased by this proposed amendment. We find that the power level increase is bounded by the assumptions used in our FES of June 1973.

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Environmental Impact of Postulated Accidents

We have evaluated the environmental impact of postulated accidents at Millstone-2 in the FES. This evaluation was performed at a thermal power level of 2700 MWt. Therefore, the conclusions reached in the June 1973 FES are not changed.

Plant Design Alternatives

We find this section is not affected by the power level increase. However, without the power level increase, the 40 MWe of electricity would continue to be produced by fossil-fired generating facilities.

Cost Benefit Analysis

The FES evaluation of the costs and benefits of Millstone Unit No. 2 was based on a power level of 2700 MWt. Since this license amendment authorizes operation at that power level, no environmental costs greater than those presented in the FES will occur, no benefits different from those evaluated in the FES will accrue, and there is no change to the cost-benefit analysis and findings in the FES.

ENVIRONMENTAL CONCLUSION AND BASIS FOR NEGATIVE DECLARATION

On the basis of the foregoing analysis, it is concluded that there will be no environmental impact attributable to the proposed action other than that which has already been predicted and described in the Commission's FES dated June 1973 for Millstone-2. Having made this conclusion, the Commission has further concluded that no environmental impact statement for the proposed action need be prepared and that a negative declaration to this effect is appropriate.

Dated: June 25, 1979