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UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-49, issued to Northeast Nuclear Energy Company, et al. (the licensee) for the Millstone Nuclear Power Station, Unit No. 3, located at the licensee's site in New London County, Connecticut.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

By applications for license amendments dated October 25, 1990, November 1, 1990 (with supplements dated November 2, 1990 and December 4, 1990) and November 30, 1990, the licensee requested changes to the Millstone Unit 3 Technical Specifications (TS) associated with Cycle 4 operation. The applications for license amendments would change the TS associated with the following: (1) removal of the Autoclosure Interlock (ACI) for the Residual Heat Removal (RHR) System, (2) a core reload involving a modification to the fuel design and revised safety analyses and (3) temperature limits for the spent fuel pool.

The Need for the Proposed Action:

The proposed license amendment is needed for start-up and Cycle 4 operation of Millstone Unit 3.

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Environmental Impacts of the Proposed Action:

With regard to use of the modified fuel, the licensee reanalyzed the radiological consequences of two potential accidents that could have increased radiological consequences. The first accident, the locked rotor accident, was found to have potential radiological consequences that are bounded by the existing design basis accident. The second accident, the fuel handling accident, was found to have potential radiological consequences that are bounded by the current FSAR referenced calculations.

With regard to removal of the ACI, removal of the RHR ACI function addresses Commission concerns regarding the potential for failure of the ACI circuitry to cause inadvertent isolation of the RHR system with subsequent loss of RHR capability during cold shutdown and refueling operation. In addition, this proposed change is consistent with the recommendations of Generic Letter 88-17, "Loss of Decay Heat Removal." The loss of RHR during refueling could have significant offsite radiological consequences.

With regard to temperature limits associated with the SFP, the proposed change allows continued use of existing Cycle 3 specific calculations associated with spent fuel pool cooling and piping systems and pool structure integrity. Thus, no additional environmental consequences are associated with this proposed TS change.

Alternatives to the Proposed Action:

It has been concluded that there is no measurable impact associated with the proposed amendment; any alternatives to the amendment would have either essentially the same or greater environmental impact.

Alternative Use of Resources:

This action does not involve the use of any resources different from or beyond the scope of resources used during normal plant operation, which were assessed in the Final Environmental Statement relating to plant operation, dated December 1984 (NUREG-1064).

Agencies and Persons Consulted:

The Commission's staff reviewed the licensee's requests that support the proposed amendment. The staff did not consult other agencies or persons.

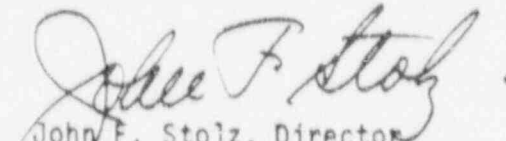
FINDING OF NO SIGNIFICANT IMPACT

Based upon the foregoing environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed amendment.

For further details with respect to this action, see the applications for license amendment dated October 25, 1990, November 1, 1990 (with Supplements dated November 2, 1990 and December 4, 1990) and November 30, 1990. These documents are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW, Washington, D.C. 20555, and at the local public document room located at the Learning Resources Center, Thames Valley State Technical College, 574 New London Turnpike, Norwich, Connecticut 06360.

Dated at Rockville, Maryland this 4th day of January 1991.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
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