



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 139

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

1.0 INTRODUCTION

By letter dated March 31, 1997, the Northeast Nuclear Energy Company, et al. (the licensee), submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 3 Technical Specifications (TS). The proposed amendment would modify Technical Specification Surveillance 4.7.1.2.1.b, which requires the testing of the auxiliary feedwater motor-driven and turbine-driven pumps on recirculation flow at least once per 92 days. The proposed amendment also makes changes to the appropriate Bases section.

2.0 EVALUATION

TS 4.7.1.2.1.b currently requires that each auxiliary feedwater pump shall be demonstrated operable at least once per 92 days on a staggered test basis. Specifically, TS 4.7.1.2.1.b.1 requires verification that on recirculation flow each motor-driven pump develops a differential pressure of greater than or equal to 1460 pounds per square inch differential (psid) when tested pursuant to Specification 4.0.5 (surveillance requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components). TS 4.7.1.2.1.b.2 requires verification that on recirculation flow the steam turbine-driven pump develops a differential pressure of greater than or equal to 1640 psid when the secondary steam supply pressure is greater than 800 psig. In the March 31, 1997, letter, the licensee requested three changes to TS Section 4.7.1.2.1.b. Specifically, the licensee requested that (1) the required test parameter for the motor-driven pumps be increased from 1460 psid to 1468 psid, (2) the current parameters for the motor-driven and turbine-driven pumps be changed from differential pressure measured in psid to total head measured in feet, and (3) the reference to Specification 4.0.5 be moved in order to clarify that it applies to the testing of the motor-driven and turbine-driven pumps.

During a review of the previous calculation that established the acceptance criteria for the surveillance, the licensee discovered that the surveillance limits were developed with a nonconservative pump degradation allowance. When the licensee revised the calculation using proper data, the required differential pressure for the motor-driven pumps increased to 1468 psid. The NRC staff finds the change in required differential pressure from 1460 psid to

1468 psid acceptable in that it is relatively small when compared to the required value, the surveillance will continue to provide assurance that the motor-driven pumps will operate consistent with system evaluations, and it will provide assurance that the motor-driven pumps will perform their intended safety function.

The change in the referenced units from differential pressure measured in psid to total head measured in feet for the motor-driven and turbine-driven auxiliary feedwater pumps during surveillance testing allows the licensee to account for the effect of water density on pump performance during each test. The NRC staff finds the change acceptable in that the surveillance continues to provide the necessary assurance that the pumps will function as required in accident analyses and the change in parameter units does not change how the pumps are operated.

Also, moving the reference to Specification 4.0.5 clarifies that both the motor-driven and turbine-driven surveillances must be conducted in accordance with the inservice testing requirements. This change is administrative and clarifies the TS; therefore, the NRC staff finds it acceptable.

Based on the above, the NRC staff finds the proposed changes to TS 4.7.1.2.1.b acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (62 FR 19832 dated April 23, 1997). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: ~~May~~ 29, 1997