

SUPPLEMENTAL SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR RELIEF FROM ASME CODE REQUIREMENTS

(TEMPORARY REPLACEMENT OF ASME CODE CLASS 3 PIPING)

NORTHEAST UTILITIES

MILLSTONE NUCLEAR POWER STATION, UNIT 3

DOCKET NO. 50-243

1.0 INTRODUCTION

Section 50.55a, "Codes and Standards," of 10 CFR Part 50 requires, in part, that safety-related components meet the requirements of Section XI of the American Society of Mechanical Engineers' (ASME) Boiler and Pressure Vessel Code (code). Section XI of the code specifies the requirements for repair, replacement, and modification of Class 1, 2, and 3 components of operating nuclear power plants. However, repair, replacement or modification to code requirements may be impractical.

Pursuant to 10 CFR 50.55a(g)(5), if the licensee determines that conformance with a requirement of Section XI of the code is not practical for his facility, information shall be submitted to the Commission in support of that determination and a request made for relief from code requirements. After evaluation of the determination, pursuant to 10 CFR 50.55a(g)(6)(i), the Commission may grant relief and may impose alternative requirements that are determined to be authorized by law, will not endanger life or property or the common defense and security, and are otherwise in the public interest, giving due consideration to the burden upon the licensee that could result if the requirements were imposed.

As stated in a letter dated September 26, 1990, Northeast Utilities (the licensee) had determined that replacement of expansion joint 3-SWP-EJ10A in the service water system, control building air conditioning to code requirements was impractical. A pinhole leak was detected in this joint during plant operation, and could not be weld repaired. The licensee requested relief from the code requirements. The staff in a letter to the licensee dated October 16, 1990, granted relief for a non-code replacement expansion joint until the next scheduled refueling outage (approximately March 1991), with the temporary non-code replacement to be replaced with an item in conformance with the code.

The licensee, in a subsequent letter dated January 30, 1991, requested an extension of the use of the non-code replacement until after the refueling outage. The licensee expected the replacement joint to be available within three months after the refueling outage, at which time it will be installed. The subject piping is isolable during power operation, therefore installation will not require an additional plant outage.

2.0 EVALUATION OF RELIEF REQUEST

Code Requirement

Article IWD-7000, "Replacements," of Section XI of the code specifies the requirements for the replacement of code components.

Code Relief Request

Relief is requested to allow the extension of previously granted relief for an additional three months after the refueling outage (March, 1991) until June 30, 1991.

Basis for Relief

Code repair requirements are impractical because a weld repair cannot be performed on the expansion joint and a code qualified replacement cannot be obtained for several months. An extension past the original date granted for the relief requested is necessary because the joint had been redesigned and delayed the placing of the order for this part.

Proposed Alternative

Extend the use of the temporary replacement as previously granted.

Staff Evaluation and Conclusions

The staff in their letter of October 16, 1990, in accordance with 10 CFR 50.55a(g)(6)(i), had previously determined that code repair requirements were impractical, and that the non-code replacement joint could be used until the end of the refueling outage estimated to be March 1991. The expected useful life of the material of the temporary replacement expansion joint is ten years. The original planned use of the temporary replacement was six months. Pursuant to 10 CFR 50.55a(g)(6)(i), an extension of three months past the original time granted (the end of the refueling outage estimated to be in March 1991), or until June 30, 1991 would not change the level of safety or quality. Before June 30, 1991, a repair to code requirements or a replacement must be made. Such relief is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. This relief has been granted given due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

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Dated: March 20, 1991