



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
OF THE FIRST TEN-YEAR INTERVAL INSERVICE INSPECTION PROGRAM

DUKE POWER COMPANY

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NUMBERS 50-369 AND 50-370

1.0 BACKGROUND

By letter dated November 7, 1984, Duke Power Company (licensee) submitted to the NRC Revision 6 of the McGuire Nuclear Station Units 1 and 2 First Ten-Year Interval Inservice Inspection (ISI) Program. Additional information regarding the program was requested from the licensee by letters dated May 7, 1986 and November 15, 1988. The licensee responded by letters dated June 20, 1986 and March 1, 1989; the latter response included Revision 11 of the ISI Program. Technical Specifications for the McGuire Nuclear Station Units 1 and 2 require inservice inspection of American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components to be performed in accordance with the requirements of applicable editions and addenda of Section XI of the ASME Code except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the initial 10-year interval comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) on the date 12 months prior to the issuance of the operating license, subject to the limitations and modifications listed therein. The components (including supports) may meet the requirements set forth in subsequent editions and addenda of the ASME Code incorporated by reference in 10 CFR 50.55a(b) subject to the limitations and modifications listed therein.

Pursuant to 10 CFR 50.55a(g)(5), if the licensee determines that conformance with an examination requirement of Section XI of the ASME Code is not practical for its facility, information shall be submitted to the Commission in support of that determination and a request made for relief from the ASME Code requirement. 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.

The licensee has prepared the McGuire Nuclear Station Units 1 and 2 First Ten-Year Interval Inservice Inspection Program, Revision 11, in accordance with the requirements of the 1980 Edition through Winter 1980 Addenda of Section XI of the ASME Code. The staff, with technical assistance from its contractor, Science Applications International Corporation (SAIC) has evaluated the Ten-Year Interval Inservice Inspection Program through Revision 11, additional information provided by the licensee regarding the program, and requests for relief from certain Section XI Code requirements that have been determined to be impractical to perform at McGuire Nuclear Station Units 1 and 2.

2.0 EVALUATION

The ISI Program Plan has been evaluated for (a) application of the correct Section XI Code edition and addenda, (b) compliance with examination and system pressure test requirements of Section XI, (c) acceptability of the examination sample, (d) compliance with prior ISI commitments made by the licensee, (e) correctness of the application of system or component examination exclusion criteria, and (f) adequate information in support of requests for relief from impractical Section XI Code requirements. The staff has determined that the licensee's ISI Program Plan generally reflects compliance with the requirements listed above with the following exceptions:

- (a) Numerous examinations at both units do not meet scheduling requirements of Tables IWB-2412-1 and IWC-2412-1, and
- (b) Some augmented examination requirements committed to in the FSAR are not indicated as being complied with.

The information provided by the licensee in support of requests for relief from impractical requirements has been evaluated and the basis for granting relief from those requirements are documented in the SAIC Technical Evaluation Report SAIC-88/1943 (Enclosure 2). We concur with and adopt the findings and recommendations contained in the report. In addition, for Relief Request 88-08 and the repair welds associated with the Safety Injection system, the staff has determined that compliance with the requirements delineated in Section XI of the ASME Code for the components for which relief is requested would necessitate the redesign or replacement of the affected system or equipment. Table 1 (Enclosure 3) presents a summary of the relief requests and the status of each request as determined by the staff.

3.0 CONCLUSION

The staff has determined that the First Ten-Year Interval Inservice Inspection Program, Revision 11 for McGuire Nuclear Station, Units 1 and 2 with additional information provided constitutes part of the basis for compliance with 10 CFR

50.55a(g) and Technical Specifications. Exceptions to this conclusion noted in Section 2.0 above are not of such concern that they would compromise the safety of the facilities or the public but should be noted by the licensee and proper action taken to rectify the exceptions. The staff has determined, pursuant to 10 CFR 50.55a(g)(6)(i), that the requirements of Section XI cited by the licensee for certain examinations at McGuire Nuclear Station Units 1 and 2 are impractical to perform. The reliefs from those requirements granted are 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 that could result if the requirements were imposed on the facility. The staff therefore concludes that the First Ten-year Interval Inservice Inspection Program for McGuire Nuclear Station Units 1 and 2 is acceptable for implementation at the facilities.

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Dated: