



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

March 14, 1988

Docket No. 50-369

Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
Duke Power Company  
422 South Church Street  
Charlotte, North Carolina 28242

Dear Mr. Tucker:

SUBJECT: RELIEF FROM ASME CODE TEST REQUIREMENT FOR THE NUCLEAR SERVICE WATER SYSTEM, MCGUIRE NUCLEAR STATION, UNIT 1 (TAC 67032)

By letter dated January 28, 1988, you submitted Relief Request No. 88-01 which requested relief from the ASME Boiler and Pressure Vessel Code requirement for hydrostatic testing of repair welds RN1F 841A, RN 507-2 and 1RN-EXP4B-1 in the Nuclear Service Water System at the McGuire Nuclear Station, Unit 1. You had determined that the test requirement of Section XI, 1980 Edition, Winter 1980 Addenda, Articles IWA-4000 and IWD-5000, was impractical to perform because the piping containing these welds could not be isolated for pressurization. The pump capacity to pressurize the piping is insufficient to offset the leakage through the butterfly valve used to isolate the welded section. The Nuclear Service Water System is a 24-in. diameter plain carbon steel line designed to operate at 35 psig pressure and 95°F temperature.

The integrity of the weld repair is assured by performing either a dye penetrant or magnetic particle inspection of both the root and final weld passes. In addition, a radiographic examination is made on the repair weld involving the base metal. An inservice leak test at system pressure and temperature is performed when the system is placed in service to detect weld defects and through wall leakage.

The staff has evaluated Relief Request No. 88-01. We conclude that the ASME Code requirement is impractical to perform at the McGuire Nuclear Station, Unit 1, and that the alternative tests provide an acceptable level of structural integrity for the Nuclear Service Water System. Compliance with the specific ASME Code requirement would result in hardship without a compensating increase in the level of quality and safety.

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Mr. H. B. Tucker

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Accordingly, relief from the hydrostatic test requirement is granted for McGuire Unit 1 as requested, pursuant to 10 CFR 50.55a(g)(6)(i). This 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 given due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

Sincerely,

Original signed by:

Darl Hood, Acting Director  
Project Directorate II-3  
Division of Reactor Projects-I/II

cc:  
See next page

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McGuire Nuclear Station

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