

DUKE POWER COMPANY

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TELEPHONE
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March 11, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: McGuire Nuclear Station
Docket Nos. 50-369 and 50-370
Request for Relief From ASME Code Section XI Requirement Determined
to be Impractical

Dear Mr. Denton:

Please find attached a request for relief from Hydrostatic Testing requirements on the Feedwater Systems to the Units One and Two steam generators. Note that this section of the Feedwater System falls into the same area as that for which exemption from Hydrostatic Testing was requested and granted for the feedwater nozzle modification of the Units 1 and 2 steam generators (reference my letters dated September 14 and October 19, 1982, and Mr. T. M. Novak's (NRC/NRR) response dated December 29, 1982). These additional piping modifications were determined (after submittal of the original S/G modification relief request) to be necessary to insure the proper heat-up of the Feedwater System to prevent thermal shock of the piping and nozzle areas of the steam generators. These modifications are scheduled to be performed during the current outage on Unit One, and later this year on Unit 2.

Also attached is McGuire FSAR Fig. 10.4.7-3 (2 of 2) with the affected areas highlighted. Although the figure is of Unit 1, the Unit 1 and 2 systems are identical.

It is requested that this relief request receive immediate attention, in order to meet present scheduling activities, and the return of the systems to operation in a timely manner. Note that this matter has previously been discussed with your staff. If there are any questions, please advise.

Very truly yours,

H. B. Tucker / *BT*
Hal B. Tucker

PBN:jfw
Attachments

Boz!
Add: M. Hum

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March 11, 1983
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cc: (w/attachments)
Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta Georgia 30303

Mr. W. T. Orders
Senior Resident Inspector
McGuire Nuclear Station

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION

REQUEST FOR RELIEF FROM ASME CODE SECTION XI REQUIREMENT DETERMINED TO
BE IMPRACTICAL

(1) Component for which relief is requested:

A. Name and Number

Piping on Units 1 and 2 feedwater (CF) system is to be modified in order to provide heat-up capabilities of this same system to protect against thermal shock on the steam generator nozzle area.

B. Function

The main feedwater system supplies water to the steam generators where it removes heat from the reactor coolant system.

C. ASME Section III Code Class

Equivalent Class 2.

D. Valve Category

N/A.

E. Materials and Welds

Materials: 2" C.S. Pipe, SA-106, B; Schedule 80, .218 wall

2" C.S. 90° Socket Weld Elbow, SA-105/SA-234 WPB, 3000 #.

Welds: There are approximately 16 2-inch socket welds on 4 separate feedwater lines on each unit.

(2) ASME Code Section XI requirement that has been determined to be impractical:

ASME B & PV Code, Section XI, 1977 Edition through summer of 1978 Addenda, Article IWA-4400, IWC-5000.

(3) Basis for requesting relief:

Performing a hydrostatic test on the feedwater piping would be impractical, extremely difficult, and very costly, due to the following reasons:

- (a) Isolation and preparation of this system would result in considerable additional radiation exposure to personnel.

- (b) Additional time required to gag safety relief valves.
- (c) Additional time required to pin or block main steam constant support hangers.
- (d) Potential damage due to static load on main steam system caused by water solid condition.
- (e) Potential damage to S.G. tube bundle.
- (f) Potential leakage through main steam isolation valves, feedwater isolation valves, and other valves in the system (inability to hold pressure).
- (g) Potential damage to instrumentation, or considerable delay due to isolation/removal of instrumentation.
- (h) Loss of steam generator hydro cycle.

In addition to these reasons, the alternate examinations as specified in (4) are equal to or better than the required testing per the code.

(4) Alternate Examination

- A. 100% penetrant test of all boundary welds plus an additional inservice leak test with system at operating pressure. Also, a hydro will be performed at the 10-year inspection interval per Section XI of the ASME Code.

(5) Implementation

These examinations, with the exception of the Hydrostatic Test, will be conducted after the feedwater piping modification is complete and prior to the system being declared operable.



