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August 25, 1983

NUCLEAR PRODUCTION DEPARTMENT

U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D. C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417
License No. NPF-13
File: 0260/L-860.0/L-952.0/M-189.0
Preservice Inspection to ASME
Section XI (Request No. 00024)
AECM-83/0424

This letter transmits a request for relief (No. 00024) from ASME Section XI Code requirements for the Preservice Inspection of the nozzle inside radius section of the Residual Heat Removal Heat Exchanger for the Grand Gulf Nuclear Station (GGNS) Unit 1 in accordance with 10CFR50.55a(g)(5)(IV).

The attachment delineates the information with regard to such a relief request for your review.

If you have any questions or require further information, please contact this office.

Yours truly,

L. F. Dale
Manager of Nuclear Services

GS/JGC:rg

Attachment: Request for Relief from ASME Section XI

cc: See next page

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MISSISSIPPI POWER & LIGHT COMPANY

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ATTACHMENTREQUEST FOR RELIEF NO. 00024
GRAND GULF NUCLEAR STATION UNIT 1
PRESERVICE INSPECTION

- I. Component: Residual Heat Removal (RHR) Heat Exchanger #1E12B001A. The N3 and N4 nozzles inside radius section.
- II. Code: The RHR Heat Exchanger nozzles were fabricated in accordance with ASME Section III, Class 2 requirements, preservice inspection to be performed in accordance with ASME Section XI, 1977 edition, through and including, summer 1978 Addenda.
- III. Code Requirements: (ASME Section XI) The inside radius section of the N3 and N4 nozzles on the RHR Heat Exchanger #1E12B001A is required to be volumetrically examined once as a preservice and once every 10-year inservice inspection interval, in accordance with ASME Section XI, IWC-2500-1, Examination Category C-B, Item No. C2.20.
- IV. Information to support determination that the code requirements is impractical for preservice inspection Approximately 1160 manhours would be required to remove and replace already-installed insulation on the RHR Heat Exchanger nozzles to perform a volumetric examination on the inside radius section. Radiography and ultrasonic examinations have been performed and accepted on the actual nozzle welds per ASME Section III criteria and General Electric Company specifications.
- V. Reasons why relief should be granted: Request for an exemption from preservice volumetric examination on the RHR Heat Exchanger nozzle inside radius section is based on the following:
1. Nozzle welds (N3 & N4) have been volumetrically examined by radiography and ultrasonics and passed in accordance with the ASME Section III, Class 2 requirements.
 2. Nozzle Welds (N3 & N4) were subject to, and passed, a design Hydrostatic Pressure Test during fabrication, in accordance with ASME Section III, Class 2 requirements.

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PRESERVICE INSPECTION

3. The RHR Heat Exchangers will be subject to a system pressure test, in accordance with ASME Section XI, Class 2 requirements.
4. All modes of RHR, that require the use of the RHR Heat Exchangers, function as two (2) separate streams with two (2) heat exchangers in series per stream. While there are no provisions for the isolation of any one (1) heat exchanger, either one of the two streams can be isolated. The RHR system design criteria allows for the isolation of either stream without adversely affecting plant safety or the ability of the system to perform its intended function.
5. The inside radius of the nozzles N3 and N4 shall be subject to ultrasonic examination during the 3rd inspection period of the first 10-year interval. If at that time the ultrasonic examination reveals recordable indications, future examinations will be conducted on a more frequent basis to determine whether indications are progressive in nature or represent the original structure.

VI. Alternate Scheduling/
Testing:

No alternative testing is being proposed, because hydrostatic test, and shop and field examinations would serve the purpose of preservice examination in accordance with ASME Section XI, IWC-2200, Item (b).

VII. Conclusion:

With the already acceptable, more stringent radiography and ultrasonic examination performed per ASME Code Section III and General Electric Specifications on these nozzles, it is expected that the nonperformance of the required preservice examination will have no adverse effect on plant safety. Therefore, the expenditure to remove and replace insulation to perform a preservice examination is impractical and it would cause hardships without a compensating increase in the level of quality and safety.