



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

NUCLEAR PRODUCTION DEPARTMENT

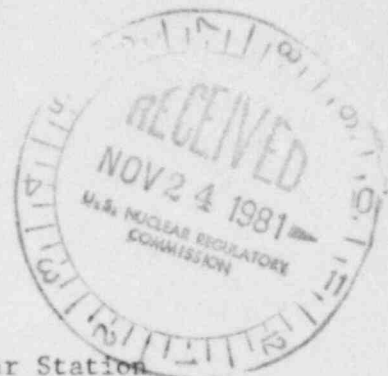
November 24, 1981

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
File 0260/L-334.0/L-350.0
Response to SER Item 1.11(2)
AECM-81/426



In accordance with your request for additional information in support of the Grand Gulf Nuclear Station (GGNS) Safety Evaluation Report (SER), NUREG-0831, Mississippi Power & Light Company is submitting the enclosed information regarding channel box deflection information, SER Item 1.11(2).

This information represents a proposed change to the GGNS Final Safety Analysis Report (FSAR). This proposed FSAR change will be incorporated into the next available amendment to the FSAR. This change will supersede the response to Core Performance Branch Draft SER Item 4.2.3-4.

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

Yours truly,

L. F. Dale
Manager of Nuclear Services

JHS/JGC/JDR:ph

Attachment

cc: Mr. N. L. Stampley
Mr. R. B. McGehee
Mr. T. B. Conner
Mr. G. B. Taylor

Mr. Richard C. DeYoung, Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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BRANCH: Core Performance Branch

CONCERN: SER Item 1.11(2)

RESPONSE: The following general guidelines are exercised to mitigate the consequences of channel bowing.

- a. Records are kept of channel location and exposure for each operating cycle.
- b. Channels should not reside in the outer row of the core for more than two operating cycles.
- c. At the beginning of each fuel cycle, the combined outer row residence time for any two channels in any control rod cell should not exceed four peripheral cycles.

Prior to beginning a new operating cycle, control rod drive friction tests shall be performed for those core cells exceeding the above general guidelines or containing fuel channels with exposures greater than 30,000 MWd/T (associated fuel bundle exposures).

In lieu of friction testing, fuel channel deflection measurements may be used to justify use of fuel channels exceeding 30,000 MWd/T exposure for a maximum of four additional operating cycles.

In the future, analytical channel lifetime prediction methods, benchmarked and backed up by periodic deflection measurements of a sample of the highest duty fuel channels, may be used to ensure clearance between control rod blades and fuel channels without additional testing.