



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39215-1640

November 1, 1985

NUCLEAR LICENSING & SAFETY 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-29
File: 0260/M-181.1
High Density Spent Fuel
Racks - Stress Criteria
AECM-85/0352

By letter dated May 6, 1985 (AECM-85/0143) Mississippi Power & Light (MP&L) requested an amendment to License NPF-29 to allow the installation of high density spent fuel racks (HDSFR) at Grand Gulf Unit 1. During a recent conversation related to the subject amendment request, members of your staff requested that MP&L clarify utilization of stress criteria for the HDSFR.

MP&L's response to the staff's request is provided as an attachment to this letter. If you have any additional questions, please contact this office.

Yours truly,

L. F. Dale
Director

MLC/JGC:bms
Attachment

cc: (See Next Page)

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cc: Mr. O. D. Kingsley, Jr. (w/a)
Mr. T. H. Cloninger (w/a)
Mr. R. B. McGehee (w/a)
Mr. N. S. Reynolds (w/a)
Mr. H. L. Thomas (w/o)
Mr. R. C. Butcher (w/a)

Mr. James M. Taylor, Director (w/a)
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dr. J. Nelson Grace, Regional Administrator (w/a)
U. S. Nuclear Regulatory Commission
Region II
101 Marietta St., N. W., Suite 2900
Atlanta, Georgia 30323

QUESTION: Please indicate if the racks meet OT position stress criteria * .
The criteria shown in the Licensing Report (page 6-18) is from
NUREG-0800.

ANSWER: The stress factors shown in Tables 6.5 and 6.6 of the licensing
report are the maximum values (maximum in space and maximum in time)
which occur in the rack support feet. The stresses in the body of
the rack proper are significantly smaller (almost an order of
magnitude smaller). Since there is no interaction between T, T
loads, and inertia loads (D, L, E, E') in the support feet, the SRP
3.8.4 (ref. 14) and OT Position * criteria both boil down to the
following effective limits:

Loading

D + L + E	Normal limits as stated in Appendix XVII-2000
D + L + E'	Normal condition stress limits increased by Appendix F-1370.

Thus, although there are differences in the stress criteria between the OT
position paper and NUREG-0800, SRP-3.8.4, Appendix D, they amount to the
identical limits for Grand Gulf rack modules.

* "OT Position for Review and Acceptance of Spent Fuel Storage and Handling
Applications", April 14, 1978 and January 18, 1979 modifications, USNRC,
Washington, D.C.