



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

February 9, 1984

NUCLEAR PRODUCTION DEPARTMENT

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
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 0272/0756
Evaluation of Containment and
Penetrations for External
Pressure Due to Hydrogen
Combustion
AECM-84/0066

The containments for the Grand Gulf units have been designed for 3.0 psid external pressure differential (see Table 6.2-1 of FSAR) and designed in accordance with Section 3.8 in the FSAR. Mr. C. G. Tinkler of the NRC Containment Systems Branch has requested Mississippi Power & Light Company (MP&L) to evaluate the containment and containment penetrations for a negative internal differential pressure due to a hydrogen combustion event which depleted oxygen, condensation of steam due to operation of sprays, and loss of containment inventory due to leakage. A pressure differential of 5 psid was agreed to as a bounding value for the containment after the events described above.

We have completed our evaluation of the aforementioned conditions with regard to the containment, liner, and penetrations and have determined that they are capable of withstanding the 5 psid negative internal pressure and have assured that the containment pressure boundary will not be compromised.

Yours truly,

L. F. Dale

L. F. Dale
Manager of Nuclear Services

DBH/JRH/SHH:lm

cc: (See Next Page)

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Member Middle South Utilities System

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MISSISSIPPI POWER & LIGHT COMPANY

cc: Mr. J. B. Richard
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

Mr. J. P. O'Reilly, Regional Administrator
U.S. Nuclear Regulatory Commission
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