November 22, 1985

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Docket Nos: 50-416
and 50-417

Mr. Jackson B. Richard
Senior Vice President, Nuclear
Mississippi Power and Light Company
P.O. Box 23054
Jackson, Mississippi 39205

Dear Mr. Richard:

Subject: Grand Gulf Nuclear Station Units 1 and 2 - Qualification of Accumulators for Automatic Depressurization System (ADS) Valves

By letter dated March 15, 1985, the NRC staff provided to Mississippi Power and Light Company (MP&L) the staff's safety evaluation of MP&L's response to the requirements of TMI Action Plan II.K.3.28 "Verify Qualification of Accumulators on ADS Valves: (NUREG-0737)." The staff concluded that the ADS system met the requirements in NUREG-0737 for short term operability following an accident and requested additional information to verify long term operability. For long term post-accident operability, licensee proposed to connect a temporary air supply to the instrument air system that operates the ADS valves. However, the calculated post-accident radiation dose at the location where the connection would be made was higher than staff guidelines for this activity. By letter dated August 15, 1985, MP&L submitted additional information addressing staff's concern by committing to relocate the temporary air supply makeup connection to a lower post-accident radiation area.

The NRC staff has completed its review of the licensee's August 15, 1985, submittal. The staff's safety evaluation is enclosed. The staff concludes that the proposed relocation of the makeup air connection is acceptable because the calculated post-accident radiation dose meets staff guidelines.

Based on the NRC staff's safety evaluation enclosed in its March 15, 1985, letter and the enclosed safety evaluation, the staff concludes that the design requirements of TMI Action Item II.K.3.28 have been satisfied for Grand Gulf Units 1 and 2. The staff also concludes that completion of the modifications

to the ADS accumulators for Grand Gulf Unit 1 prior to startup following the first refueling, as required by License Condition 2.C.(33)(g) and by the commitment in MP&L's August 15, 1985, letter, will provide an ADS accumulator system for Grand Gulf Unit 1 with acceptable qualification for long term operability.

Sincerely,

Original signed by:
Thomas M. Novak

Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

Enclosure:
As stated

cc: See next page

DL:LB #4	LA:DL:LB #4	DL:LB #1	AD:L:DL
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10/01/85	10/5/85	10/04/85	10/2/85

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ENCLOSURE

SUPPLEMENTAL SAFETY EVALUATION REPORT
TMI ACTION PLAN II.K.3.28 VERIFY QUALIFICATION OF ACCUMULATORS ON ADS VALVES
GRAND GULF NUCLEAR STATION, UNITS 1 AND 2
DOCKET NOS. 50-416/417

1.0 INTRODUCTION

On March 15, 1985, the NRC Issued a Safety Evaluation Report (SER) for the Grand Gulf Nuclear Station, Units 1 and 2 for TMI Action Plan II.K.3.28. The SER was based on the licensee's November 17, 1982, December 20, 1982, November 24, 1983, and January 20, 1985, submittals. The SER verified short term qualification, but required additional information to demonstrate long term capability. The licensee responded to the SER by a submittal dated August 15, 1985. This supplemental SER presents an additional evaluation to the licensee's position based on the latest and previous submittals.

2.0 DISCUSSION

The licensee's August 15, 1985, submittal provides additional information for the long term capability of the ADS accumulator system for Grand Gulf Units 1 and 2. This information was requested in order to resolve a concern on long term post-accident operability of the ADS since the existing makeup connection is located in a high radiation area. Mississippi Power & Light (MP&L) has committed to relocate the air supply makeup connection.

For Grand Gulf Unit 1, prior to startup following the first refueling outage, the existing air supply connection (the test connection between containment isolation valve Q1P53-F003-A and the containment penetration) located at elevation 166'-10½' within the Auxiliary Building will be moved to elevation 139'-0' within the Auxiliary Building. This new location was classified in MP&L's NUREG-0588 response as having a five day post-accident environment of: temperature 80°F, pressure ±1" water gauge, and 50% relative humidity. The calculated radiation dose in this area is 0.865 rem/hour, based on access up to five days following an accident. The air supply connection will be designed and constructed to ASME Section III Class 3, Seismic Category I requirements. The staff finds this acceptable.

3.0 CONCLUSION

Based on the information provided by the licensee and summarized in Section 2, the staff concludes that the licensee has verified long term qualification for the design of the accumulators on the ADS valves. Therefore, the staff concludes that the Grand Gulf Nuclear Station, Units 1 and 2 has satisfied the design requirements of TMI Action Item II.K.3.28.