August 31, 1984

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-13 File: 0260/L-860.0

Diesel Generator Turbochargers

AECM-84/0436

MP&L committed, in letter AECM-84/0388 dated August 2, 1984, to install temperature indicators to provide data on the exhaust gas temperatures in the region of the turbocharger inlet. The permanent installation of this instrumentation has now been completed for both the Division 1 and Division 2 engines. A thermocouple was surface mounted on each of the four connections to the inlet adapter on each of the four turbochargers.

Baseline temperature (°F) readings at various engine loadings have been taken. This data is tabulated below. These temperatures represent the temperature of the surface of the connection inside its insulation. Engineering calculations indicate that these readings are within 25°F of the actual exhaust gas stream temperatures.

Percent of Rated Load	Division I		Division	II
	Right Bank	Left Bank	Right Bank	Left Bank
25	582	627	607	580
50	747	789	766	750
70	835	860	864	842
82	893	900	898	882

Based on a review of the above data, it is concluded that the pre-turbine exhaust temperatures, when extrapolated to 100% rated load, are well below the 1200°F design temperature of the turbocharger. MP&L has added the inlet temperature data to the list of engine parameters which are to be recorded

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## MISSISSIPPI POWER & LIGHT COMPANY

hourly during surveillance testing of the engines. Should you have any questions on the above information, please advise.

Yours truly,

L. F. Dale Director

FGB/SHH:rg Attachment

cc: Mr. J. B. Richard (w/a)

Mr. R. B. McGehee (w/o)

Mr. N. S. Reynolds (w/o)

Mr. G. B. Taylor (w/o)

Mr. Richard C. DeYoung, Director (w/a)
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