



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

July 26, 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:

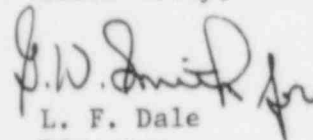
SUBJECT: Grand Gulf Nuclear Station  
Units 1 and 2  
Docket Nos. 50-416 and 50-417  
License No. NPF-13  
File: 0260/L-860.0  
Gas Turbine Generator Environmental  
Impact Information  
AECM-84/0378

By telecon on July 24, 1984 Mr. John Lehr, of your staff, requested information related to the environmental impact of the gas turbine generator (GTG) system presently installed at the Grand Gulf Nuclear Station (GGNS). The purpose of this letter is to formally provide the requested information.

Attachment 1 to this letter provides the results of a sound level survey conducted in the GTG area. Attachment 2 to this letter provides a tabulation of the gaseous emissions from both the GTG and emergency diesel generators installed at GGNS.

If you require further information please contact this office.

Yours truly,

  
L. F. Dale  
Director

MLC/JGC:rg  
Attachments

cc: See next page

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## MISSISSIPPI POWER &amp; LIGHT COMPANY

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)  
Office of Inspection & Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Mr. J. P. O'Reilly, Regional Administrator (w/a)  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N.W., Suite 2900  
Atlanta, Georgia 30323

### Gas Turbine Generators (GTG) Sound Levels

Sound level surveys were conducted during the initial operation and testing of the GTGs. The three GTGs were operated for one hour during the initial test period. No complaints related to noise or sound levels were received as a result of this testing. The maximum sound levels recorded at the GTGs were determined to be approximately 120 dBA. Subsequently, a fence was erected to surround the GTGs at a nominal distance of 50 feet where sound levels were determined to be approximately 85 dBA. The area inside the fence has been posted as a mandatory hearing protection area.

Grand Gulf Emergency Diesel Generators (D/G) and Gas Turbine Generators (GTG)  
Gaseous Emissions

	NO <sub>x</sub>	C H <sub>x</sub>	CO	Particulate	SO <sub>x</sub>	Units
HPCS D/G <sup>1</sup>	13.71	0.69	0.042	3.43	16.45	lb/hr.
IDI D/G <sup>1</sup>	29.10	1.45	0.099	7.28	34.9	lb/hr.
GTG <sup>2</sup>	19	1.9	4.2	1.9	12	lb/engine-hr.

1. Based on Table 3.7.1, GGNS Final Environmental Report

2. Based on telecon with Dan Marinacci (O'Brien Machinery - supplier of GTGs)