



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

NUCLEAR PRODUCTION DEPARTMENT

April 1, 1982

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
File 0260/0310
Optical Isolators; SER
Section 7.8(G)
AECM-82/111

As previously reported in letter submittal AECM-82/246, dated July 20, 1981, the NRC informally requested that Mississippi Power & Light Company (MP&L) provide additional information regarding the qualification of isolators used in the Grand Gulf control room design. In response to this request as discussed in AECM-81/246, MP&L stated that the optical isolators were qualified to IEEE 323-71 with further testing underway by General Electric to qualify these devices to the criteria of IEEE 323-74.

Recently, we were informed by General Electric that during accelerated thermal aging tests, four (4) out of eleven (11) optical isolator cards failed apparently because the devices were subjected to elevated testing temperatures. An evaluation of these test results is currently in progress.

However, MP&L has decided not to proceed further with the proposed qualification testing to IEEE 323-74 based on the following positions:

1. The subject optical isolators are qualified to the requirements of IEEE 323-71.
2. Failure of some of the components at artificially high temperatures for the purpose of accelerated aging does not suggest that the subject components' performance in the normal environment will be unsatisfactory.
3. The subject devices are located in a mild environment area (main control room) which is maintained by redundant HVAC systems powered by onsite emergency electrical power.

8204060132 820401
PDR ADCK 05000416
A PDR

13001
5/10

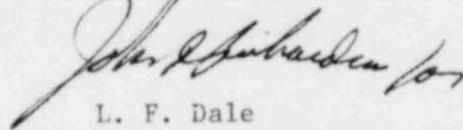
MISSISSIPPI POWER & LIGHT COMPANY

4. Surveillance requirements are performed routinely for the safety systems in which the optical isolators are incorporated.

Therefore, we believe that the current qualification to the criteria of IEEE 323-71 and IEEE 344-75 is adequate for interim operations until mild environment criteria is established by the NRC.

If you have any questions or required further information, please contact this office.

Yours truly,



L. F. Dale
Manager of Nuclear Services

JTB/JGC/JDR:lm

cc: Mr. N. L. Stampley
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
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W., Suite 3100
Atlanta, Georgia 30303