MISSISSIPPI POWER & LIGHT COMPANY
Helping Build Mississippi
P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

February 2, 1983

NUCLEAR PRODUCTION 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 0260/15180
Reference: AECM-82/626
AECM-83/012
AECM-83/32
Request for Additional Information - Protective Sleeves for LPRMs
AECM-83/73

Attached are the Mississippi Power & Light's (MP&L) responses to the Nuclear Regulatory Commission (NRC) review questions as discussed by telephone on February 2, 1983 with Mr. Dean Houston and Frank Skopec of your staff.

As discussed in the above mentioned telephone conference, MP&L is also requesting that the provisions of proposed Operating License Condition Item 2.C(42)i be extended to include reinstallation of vibration monitoring equipment so that this item would read as follows:

i. the provisions of Specification 3.9.11 may be suspended for the purpose of replacing startup sources and reinstalling vibration monitoring equipment.

Specification 3.9.11 requires at least one shutdown cooling loop in operation. Some of the vibration monitoring instrumentation equipment must be reinstalled near the feedwater spargers.

MP&L feels that operation of shutdown cooling during this operation would be an unnecessary risk to personnel working in this area.

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If additional information is required, please advise.

Yours truly,

L. F. Dale
Manager of Nuclear Services

JOF/SHH/JDR:sap
Attachment

cc: Mr. N. L. Stampley (w/o)
Mr. R. B. McGehee (w/o)
Mr. T. B. Conner (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)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 3100
Atlanta, Georgia 30303

Response to Nuclear Regulatory Commission concerns regarding radiological assessment of radiation levels in the work area.

9.1 Concern

What radiation levels are expected in the work area?

Response

During August of 1982, after initial fuel load, a radiation survey was made which measured radiation levels at the top of the core with water level lowered to just below the top guide. The survey was made for the installation the vibration monitoring equipment on the fuel bundles. The dose rate at this time was 2.5 mr/hr; 1.5 from neutrons and 1.0 from gamma.

The work procedure in question will require water level to be approximately eighteen (18) inches lower than during the above survey but the sources will have decayed for about six months [weaker by a factor of eight (8)].

Considering the fact that most of the shielding of radiation is from the fuel, the lower water level will have a negligible effect. The net result is that radiation levels will be no higher than the above survey.

9.2 Concern

What is the maximum expected dose rate of one fuel assembly in air?

Response

Our calculations show that the maximum possible dose would be ten (10) mr at a distance of one (1) foot or two (2) mr at a distance of one (1) meter.

9.3 Concern

What is the total estimated personnel exposure?

Response

Using the 2.5 mr/hr figure (which would be very conservative), a maximum of five people in the work area at one time, five working days (three shifts per day), the total estimated personnel exposure would be no greater than 1.5 man-rem.