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

July 7, 1981

NUCLEAR PRODUCTION DEPARTMENT

Mr. D. G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Eisenhut:

SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and
50-417
File 9000/16734
Emergency Procedures and
Training for Station
Blackouts
AECM-81/214

In response to your generic letter, 81-04, MP&L has completed an evaluation of the adequacy of operating procedures and training programs needed for response to a loss of all AC power.

The review of current operating procedures and training programs has considered the ability to mitigate the consequences of a blackout event and, where it appears advisable, additional procedures and training programs will be formulated. The evaluation included, but was not limited to, specific areas of concern addressed in said generic letter.

The potential problems addressed in your letter and a summary of MP&L's assessment of the problems and procedures and/or training programs to be used in the solution of the problems are listed below.

A. The actions necessary and equipment available to maintain the reactor coolant inventory and heat removal with only DC power available, including consideration of the unavailability of auxiliary systems such as ventilation and component cooling.

Response: The necessary actions and equipment available are within the scope of the GGNS Emergency Procedures which will be developed from the BWR Emergency Procedure Guidelines. The Emergency Procedures contain the essential actions and cautions for mitigation of the consequences of a station blackout event with regard to assurance of adequate core cooling.

B001
s
1/0

B. The estimated time available to restore AC power and its basis.

Response: Procedures and Training Programs will take into consideration the estimated time available to restore AC power.

C. The actions for restoring offsite AC power in the event of a loss of the grid.

Response: Procedures and training programs will be developed that will include actions for restoration of offsite power following a loss of the grid.

D. The actions for restoring offsite AC power when its loss is due to postulated onsite equipment failures.

Response: Design features such as selective tripping, equipment redundancy, and equipment separation create a low probability of loss of offsite AC power due to any single onsite equipment failure. However, procedures will be developed which provide directions for the restoration of offsite AC power in the event of loss of offsite AC power due to onsite equipment failure.

E. The actions necessary to restore emergency onsite AC power. The actions required to restart diesel generators should include consideration of loading sequence and the unavailability of AC power.

Response: Procedures will be developed which provide direction, including consideration of load sequencing, in the event of loss of or failure of the emergency diesel generators. In addition, a study will be conducted to determine the availability of temporary equipment and the feasibility of using such equipment to provide AC power to selected buses if AC power is not otherwise restored within the critical time period to be determined in response B, above.

F. Consideration of the availability of emergency lighting, and any actions required to provide such lighting, in equipment areas where operator or maintenance actions may be necessary.

Response: Adequate DC powered emergency lighting will exist throughout the plant.

MISSISSIPPI POWER & LIGHT COMPANY

G. Precautions to prevent equipment damage during the return to normal operating conditions following restoration of AC power. For example, the limitations and operating sequence requirements which must be followed to restart the reactor coolant pumps following an extended loss of seal injection water should be considered in the recovery procedures.

Response: The individual System Operating Instructions which will be developed will contain prerequisites for starting individual equipment. Additionally, a study will be conducted to determine which plant equipment will automatically restart upon the restoration of AC power and, if necessary, directions to prevent equipment damage will be incorporated into the procedures being developed in items C and D.

The procedures discussed above will be implemented prior to initial fuel load. Formal classroom training on these procedures as well as simulator training on the Emergency Procedures, referred to in item A, will also be conducted prior to initial fuel load.

Simulator training on other procedures, insofar as they are amenable to simulation, will be conducted during the first annual requalification cycle following commercial operation.

Yours truly,

L. F. Dale
Manager of Nuclear Services

PJR/JDR:mm

cc: Mr. N. L. Stampley
Mr. G. B. Taylor
Mr. R. B. McGehee
Mr. T. B. Conner

Mr. Victor Stello, Jr., Director
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555