



MISSISSIPPI POWER & LIGHT COMPANY

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P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

November 19, 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-29
File 0260/0272/0756
Quarterly Status Report -
June 30, 1984, "Degraded
Core Accident Hydrogen
Control Program"
AECM-84/0361

The Nuclear Regulatory Commission (NRC) staff in Supplement No. 4 of the Safety Evaluation Report (SER) requested that Mississippi Power & Light (MP&L) submit to the NRC quarterly reports on the status of the "Degraded Core Accident Hydrogen Control Program." In response to that request MP&L is herewith submitting the fourth of these status reports. This report covers the time period since April 1, 1984, through June 30, 1984.

Should you have any questions concerning this report, please contact us.

Yours truly,

S. H. Hobbs
Manager, Nuclear Safety & Compliance

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Attachment

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

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

Member Middle South Utilities System

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Quarterly Status Report for
Quarter Ending June 30, 1984

"Degraded Core Accident
Hydrogen Control Program"

Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417

Mississippi Power & Light Company

Quarterly Status Report - June 30, 1984

"Degraded Core Accident Hydrogen Control Program"

1.0 Introduction

This quarterly status report is submitted to comply with a requirement in Supplement Number 4 to NUREG-0831, Safety Evaluation Report related to the Operation of Grand Gulf Nuclear Station Units 1 and 2. This requirement specifies that Mississippi Power & Light (MP&L) should provide quarterly reports outlining the status of the on-going research program to address degraded core hydrogen control requirements. This report covers the second calendar quarter of 1984 ending June 30, 1984.

This report includes brief summaries of the submittals made by MP&L during this quarter along with summaries of meetings between the NRC staff and MP&L. MP&L is participating in the Hydrogen Control Owners Group (HCOG) which is conducting generic research and completing generic analyses to resolve the degraded core hydrogen control issue. Since the work completed by HCOG complements the MP&L program to resolve this issue, this report also includes summaries of meetings between the HCOG and the NRC. The summaries of these meetings included in this report do not reflect a formal HCOG position with respect to any issue and represent only the MP&L interpretation of the meetings.

2.0 Summary of MP&L Submittals

AECM-84/0114, April 4, 1984

MP&L provided responses to NRC Request for Additional Information (RAI) regarding the hydrogen control program. The RAIs responded to were questions 2 thru 5 from the Equipment Qualification Branch and questions 3 thru 6 from the Chemical Engineering Branch. The remaining questions were responded to by the Hydrogen Control Owners Group (HCOG) in HGN-016, dated April 2, 1984.

AECM-84/0200, May 23, 1984

MP&L transmitted the quarterly report for the status of the "Degraded Core Accident Hydrogen Control Program." This report covered the period from January 1, 1984 through March 31, 1984.

3.0 Summary of Meetings

Neither MP&L nor HCOG met with the NRC during this quarter.

4.0 Test Program Status

The summaries and status of the HCOG test program as stated here do not reflect the HCOG position with respect to any test program and represent only an MP&L interpretation of these programs.

4.1 1/4 Scale Test Program Status

Completed the tank fabrication for the test facility. Pressure tested the facility. Initiated the insulation installation.

4.1.1 Planned Activities for the 3rd Quarter of 1984

Complete construction of 1/4 scale test facility. Begin installation and calibration of instrumentation.

4.2 Ignition Effectiveness Tests in Rich Hydrogen-Air-Steam Mixture

The Final Report for the Ignition Effectiveness Test in Rich Hydrogen-Air-Steam Mixtures (including the condensation testing) was sent to the NRC by HCOG (see HCN-017, dated June 7, 1984).