



# MISSISSIPPI POWER & LIGHT COMPANY

*Helping Build Mississippi*

P. O. BOX 1640, JACKSON, MISSISSIPPI 39215-1640

April 30, 1985

## 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  
Unit 1  
Docket No. 50-416  
License No. NPF-29  
File: 0260/0650  
Ref: AECM-85/0138  
Evaluation of Recirculation Pump  
Coastdown Startup Test Data,  
Additional Information  
AECM-85/0144

This letter documents the information provided on April 29, 1985 in discussions held with Mr. W. H. Hodges of your staff and representatives of Mississippi Power & Light Company (MP&L) and General Electric. Mr. Hodges raised certain questions regarding MP&L's letter of April 28, 1985 (AECM-85/0138) which describes recent test results in the Grand Gulf Nuclear Station startup test program for Startup Test Nos. 27 and 30B.

Mr. Hodges requested clarification on the evaluation of the recirculation pump coastdown data. Regarding the ECCS evaluation, it was pointed out that the coastdown rate used for determining the impact on peak clad temperature was that associated with an inertia time constant of three seconds. This bounds the actual plant test data which was approximately equivalent to a 3.5 second inertia time constant.

For evaluation of the transient considerations, the assumed coastdown flow for the new analysis included an additional time delay which maintained flow higher than the actual test data for the initial portion of the event (0.4 - 0.5 seconds). For example, at time 0.3 seconds, the assumed analysis coastdown flow was approximately 0.997 of the initial drive flow. This assumed value bounds the sensed flow (actual test data) at time 0.3 seconds for both recirculation loops A and B on both Startup Tests 27 and 30B (See data provided on Tables 1 and 2 in the MP&L letter of April 28, 1985.)

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In conclusion, the recirculation pump coastdown assumptions used in the evaluation discussed in MP&L's letter of April 28, 1985 are considered conservative, since they bound the values of the actual test data. Please advise if any additional information is required.

MP&L is enclosing the \$150 processing fee in accordance with 10CFR170 for NRC review and approval on this matter as referenced in our April 28, 1985 letter.

Yours truly,



L. F. Dale  
Director

SAB/JGC:vog

cc: Mr. J. B. Richard  
Mr. O. D. Kingsley, Jr.  
Mr. R. B. McGehee  
Mr. N. S. Reynolds  
Mr. G. B. Taylor  
Mr. R. C. Butcher

Mr. James M. Taylor, Director  
Office of Inspection & Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dr. J. Nelson Grace, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N. W., Suite 2900  
Atlanta, Georgia 30323