



FEDERAL EXPRESS

June 12, 1991

Mr. A. Alexander, Deputy Assistant Secretary
State of Florida
Department of Environmental Regulation
Central Florida District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

RECEIVED

JUN 14 1991

*Division of Air
Resources Management*

**RE: Sanford Plant, Unit No. 4
Orimulsion Test Burn
Co-Firing - Particulate
Emissions Testing**

Dear Mr. Alexander:

Attached please find the results of particulate emission tests and visible observations conducted on Sanford Power Plant, Unit no. 4 by the Power Resources Test Group on May 28 & 29, 1991 during steady-state and soot-blowing conditions, while co-firing 40% Orimulsion and 60% Natural gas, as part of the Orimulsion Test Burn.

During steady-state conditions, EPA Method 1 through 4 and 17 were used for sampling and analysis. Unit load during the test averaged 360 MW and the unit was fired with 40% Orimulsion and 60% Natural gas. The average particulate emission rate for the three runs was 0.09 pounds per million Btu. The steady-state Orimulsion particulate emission limit for Sanford Power Plant, Unit No. 4 is 0.3 pounds per million Btu.

During sootblowing conditions, EPA Methods 1 through 4 and 17 were used for sampling and analysis. Unit load during the test averaged 363 MW and the unit was fired with 40% Orimulsion and 60% Natural gas. The average particulate emission rate for the three runs was 0.15 pounds per million Btu. The sootblowing Orimulsion particulate emission limit for Sanford Power Plant, Unit No. 4 is 0.6 pounds per million Btu. During the course of the test, the following soot-blowing procedures were conducted.

Sanford Plant, Unit No. 4
Orimulsion Test Burn
Co-Firing - Particulate
Emissions Testing
Page 2

Run No. 1: Air Pre-Heater
Run No. 2: IK's
Run No. 3: IK's

If you have any questions, please call me at (407) 697-6926.

Sincerely,

A handwritten signature in cursive script that reads "Elsa A. Bishop".

Elsa A. Bishop
Senior Environmental Coordinator
Florida Power & Light Company

EAB:jm

cc: Cindy Phillips - DER/Tall (w encl.)