



July 12, 1990

Ms. Elsa Bishop
Florida Power & Light Company
6001 Village Boulevard
West Palm Beach, FL 33407

RE: GEP Stack Height Analysis for Sanford Unit 4

Dear Ms. Bishop:

Sanford Unit 4's increase in emissions constitutes a major modification for PSD purposes and, as such, a determination of GEP stack has to be made per regulations stipulated in 40CFR Part 51.118. Because Unit 4 began operation in July, 1972, GEP for this source is defined by:

$$H_g = 2.5H$$

where H is the height of the controlling nearby structure, in this case the boiler for Unit 4. The boiler height is 157 feet, producing a GEP stack height of 392.5 feet. The length and width for this structure are 116 and 85 feet, respectively.

Modeling for Unit 4 was performed at its actual stack height of 400 feet. Additional model runs were made with Unit 4's stack height at 392.5 feet. The results indicated an increase in the maximum high, second-high (HSH) 3-hr PSD concentration (Table 3-8 in the report) of 1 ug/m^3 (0.3% of the total concentration). There was no increase in the maximum HSH 24-hr PSD concentration. It is acknowledged, therefore, that the overall effect of this difference on predicted model concentrations is insignificant. I called Lew Nagler of EPA Region IV to discuss this issue with him.

Should you have any questions or comments, please call me.

Sincerely,

A handwritten signature in cursive script that reads "Steven R. Marks". The signature is written in dark ink and is positioned above the typed name.

Steven R. Marks
Senior Scientist

KBN ENGINEERING AND APPLIED SCIENCES, INC.

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