

Department of Natural Resource Protection

Air Quality Division 218 S.W. 1st Avenue Fort Lauderdale, FL 33301

(954) 519-1220 • FAX (954) 519-1495

October 20, 1997

Mr. Peter G. Holzapfel Production Manager, Port Everglades Plant Florida Power & Light P.O.Box 13118 Fort Lauderdale, FL. 33316

RECEIVED

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BUREAU OF AIR REGULATION

CERTIFIED MAIL

P 485 594 368

Dear Mr. Holzapfel:

We are in receipt of your letter dated September 30, 1997, regarding the assessment and maintenance activities associated with flue gas leakage at the Port Everglades Plant Units 3 & 4. Thank you for your explanation of the leakage condition and the continuing efforts to maintain the integrity of the furnace chamber. As you explained, flue gas from the furnace has been exhausting into the upper plenum (penthouse) of Units 3 and 4 due to the gradual degradation of the tubesheet barrier between the combustion chamber and the penthouse. Since the penthouse outer enclosure was not designed as an air tight pressure barrier, flue gas reaching the penthouse eventually escapes to the atmosphere. As we understand, this condition is most likely to occur in 'forced draft' designed boilers, where a slight positive pressure in the furnace chamber causes the combustion flue gas to leak out.

It is our concern that the flue gas leakage may constitute a violation of your air operation permit. To assist our assessment of the leakage condition, please provide the additional information requested below:

- 1. Please establish the length of time the leakage condition existed on Units 3 & 4. Consideration should be given to the length of time your maintenance plan for the condition has been in place.
- 2. Please estimate the amount (lbs/hr) of emissions discharging from the upper plenum (penthouse) of Units 3 & 4. Please provide calculations justifying the emission estimates.
- 3. During a site visit by our staff inspector, Mr. Paul Shelton, it was noted that an exhaust vent port was installed at the top of the penthouse housing to preclude the build-up of pressure resulting from flue gas leakage. Please document when the vent was installed on Units 3 & 4.
- 4. Please explain why this agency was not notified by FPL of the leakage condition. Were the emissions included in recent Annual Operating Reports or Emissions Test Reports?

Soe - 5. Didthey? Please clarify whether the leakage condition was identified in the Title V air operation permit application submitted prior to June 16, 1996 for Units 3 & 4. If yes, was the condition characterized as fugitive emissions or as an emission point (exhaust vent)?

BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS — An Equal Opportunity Employer and Provider of Services

Please respond within 30 days of receipt of this letter. Should you have any questions, you may contact me at 954-519-1208.

Sincerely,

Jarrett A. Mack

Manager, Stationary Source Section

Thomas Tittle - FDEP Southeast District cc:

Al Linero - FDEP Tallahassee Clair Fancy - FDEP Tallahassee

John W. Stanton - FPL General Manager

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