

Enclosure 3

U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
Florida Power & Light, Lauderdale Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable opacity standards. For the four combined-cycle turbines with heat recovery steam generators, condition A.10. specifies that visible emissions shall not exceed 10% opacity while burning natural gas, or 20% opacity while burning distillate oil. Condition A.19 specifies a requirement for annual opacity tests to be performed on each combustion turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. For the two banks of 12 combustion turbines, condition B.6. specifies a 20 percent opacity limit, and condition B.14. specifies that a visible emissions compliance test shall be conducted on each combustion turbine that operates more than 400 hours in a federal fiscal year. The permit specifies that at least one combustion turbine shall be tested per year, and at least one compliance test shall be conducted on all 24 combustion turbines every five years. This does not constitute adequate periodic monitoring to ensure compliance with the opacity standards when burning fuel oil.

We recommend that the source be required to conduct visible emissions readings on a daily basis for the combined-cycle turbines and for the banks of combustion turbines, when these units burn fuel oil. The State may propose alternative monitoring so long as it yields reliable data that ensure compliance with the opacity standard.

- (2) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. Condition A.7 of the permit specifies a PM/PM10 emission limitation of 14.7 lb/hr for each combined-cycle combustion turbine fired with natural gas, and an emission limitation of 58 lb/hr for each combustion turbine fired with oil. Annual testing of PM using Method 5 or 17 is required in condition A.19 of the permit for combustion turbines with fuels used for more than 400 hours in the preceding 12-month period. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard, it must

provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard.

- (3) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in conditions A.3, and B.1 of the permit. The permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input limit. Since this recordkeeping will be used to determine compliance with an hourly heat input rate limitation, the permit should contain an hourly fuel usage recordkeeping requirement in order to ensure that the facility remains in compliance with the hourly heat input limit. As an example, please refer to condition B.25, which ensures compliance with condition B.2, the heat input limitation for each bank of gas turbines.
- (4) Practical Enforceability - Condition A.13 limits the sulfur content of light distillate oil fired in the turbines to a maximum of 0.3 weight percent and to a 12-month average value of no more than 0.2 weight percent. In order to constitute a practically enforceable requirement, this condition must be revised to clearly specify the procedures for calculating the sulfur content of the oil on a 12-month rolling average basis. This clarification is necessary because the current permit language could be interpreted to mean that the 12-month average sulfur content is calculated either as of the average of the daily sulfur analyses or as a weighted average based upon the sulfur content of the oil and amount burned on a daily basis. Of these two approaches, the only one that we consider acceptable is to calculate the average sulfur content on a mass-weighted basis. The basis for this position is that if Florida Power and Light is allowed to merely average the daily sulfur content of the oil, the company could burn large quantities of higher sulfur oil on a few days and achieve compliance by burning smaller quantities of lower sulfur content on a large number of days. Since this method of complying would circumvent the of the permit's intent to limit the annual average sulfur content of the oil combusted, the permit must be revised to eliminate the ambiguity about the calculation approach that will used to verify compliance with the annual average sulfur content limit.
- (5) Exemptions from Permitting: Appendix E-1 - It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213. 420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on

November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.

In addition to the above objections, our review has identified the following concerns regarding the Lauderdale permit:

1. VOC Emission Limit - Page 4, Facility-wide Conditions for Volatile Organic Compounds (VOCs): The permit specifies a limit for total VOC emissions from all emissions units at this facility (excluding the combined-cycle units) of 99.92 tons per year. The basis for this limit needs to be explained.

It is not clear how the throughput, record keeping, and reporting requirements for the fuel storage tanks (Section III.C., p. 24 & 25) and for solvent usage (Section III.D., p. 26) will ensure compliance with the total VOC emission limit of 99.92 tons per year. The permit (Conditions C.2. and D.2.) should specify that VOC emissions will be calculated at least monthly, rather than on an annual basis. Of note is that the models for estimating air emissions from organic liquid storage tanks are contained in Chapter 7 of AP-42, not in Section 4-3. The permit (Conditions C.3. and D.3.) should also require the actual throughput for each tank and the quantities of solvents used to be recorded on a monthly basis.
2. Fuel Monitoring Schedule - Permit Condition A.12 refers to a customized fuel monitoring schedule approved by EPA. We recommend that this schedule be included in this permit condition, rather than referencing it.
3. Permit Condition Language - Condition 9 in Section II does not appear to be complete. It seems as though the language, "No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions." should be added as the first sentence in the paragraph.
4. Permit Terms - EPA recommends that the monitoring and operations section of the permit contain language, such as "For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60

shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee." In addition, EPA recommends that similar language be added either to Condition A.1 or to a new condition, which puts the reader on notice that the 40 CFR 60 term "owner and operator," means "permittee" in this permit.