

Enclosure 1

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power & Light, Manatee 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 standard. The Manatee permit only requires an annual one hour Method 9 visible emissions reading. This does not constitute adequate periodic monitoring to ensure continuous compliance with the opacity standard. Since continuous opacity monitors (COMs) have been installed on the units in question, these monitors should be used to ensure compliance with the opacity standard. Requiring that the opacity monitors be used for conducting periodic monitoring imposes little or no additional burden on FP&L.
- (2) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. The Manatee permit requires an annual emission test to verify compliance with the applicable three-hour particulate emission standard. 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 for units 001 and 002. 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. We suggest the following approaches to periodic monitoring:
  - a) Correlate COM data to PM standard - this approach would not require additional monitoring equipment to be installed.
  - b) Correlate injection rate of specific compounds to ash content of the fuel and emission rate. Recordkeeping would consist of ash content and corresponding injection rate.
  - c) Other monitoring approach demonstrated by the permittee to be a valid method for assuring compliance with the applicable three-hour particulate matter standard.

In addition, the Manatee permit contains a provision regarding operating conditions during the annual testing for particulate matter and visible emissions which states 'that the tests shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting the maximum quantity of additives approved by the Department.' Information provided to EPA indicates that these additives are used to control both particulate matter and nitrogen oxide emissions and that the amount of additive is dependent upon the ash content of the fuel. No provision exists within the permit which requires the unit to continue operating under the same conditions which existed during the test. Condition A.27 should be modified to reflect that 'the tests shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting additives consistent with normal operating practices approved by the Department.'

- (3) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(f) 1.a., requires all emissions units to install continuous monitoring systems for monitoring opacity. The only exemption appears to be for units that do not use emission control equipment. Since emissions from units 001 and 002 are controlled with multiple cyclones, it appears that Florida regulations would require the use of COMs to determine compliance with the opacity standard. This applicable requirement must be included in the permit, or clarification must be provided in the statement of basis as to why this requirement does not apply.
- (4) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(a) requires fossil fuel steam generators to comply with a 20 percent opacity standard, with the exception that sources electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The Manatee permit requires compliance with a 40 percent opacity standard; however, it only requires an annual compliance test for particulate matter emissions. We understand that this variance from the SIP's quarterly testing requirement was granted by a State Order. However, this variance was never submitted by the State of Florida as a SIP revision, and therefore, was never approved into the SIP. Therefore, the Manatee permit must ensure compliance with the requirements of the SIP as stated in rule 62-296.405(1)(a).
- (5) Practical Enforceability - Florida rule 62-296.405(1)(c)1.g. does not contain an averaging time that can serve as an enforceable component to determine compliance with the applicable SO<sub>2</sub> standard for units 001 and 002. In instances where the SIP regulations do not indicate an averaging time

for the standard, the permit must include one to determine compliance with the applicable requirement. Even though the source has installed and certified CEMs, we understand that they have opted to demonstrate compliance with the SO<sub>2</sub> limit via fuel sampling and analysis, as allowed by Florida rule 62-296.405(1)(e)3. Florida rule 62-296.405(1)(e)3. does not specify a sampling frequency, thereby giving DEP the flexibility to specify a frequency that would ensure compliance with the standard.

Florida rule 62-296.405(1)(f)1.b. states that "Those emission units not having an operating flue gas desulfurization device may monitor sulfur dioxide emissions by fuel sampling and analysis according to methods approved by EPA." The fuel sampling approach stated in the proposed permit would allow for a determination of compliance on a monthly basis only. As stated in Rule 62-213.440(1)(b)1.b., "...monitoring requirements shall assure use of recordkeeping terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement;" The fuel sampling analysis method stated in the proposed permit is not adequate to demonstrate compliance with the applicable SO<sub>2</sub> standard which we understand to be in place to ensure compliance with the National Ambient Air Quality Standards (NAAQS). As indicated in DEP's response to comments memorandum dated October 23, 1997, DEP has determined that the averaging period for this standard should be 3 hours. Accordingly, the best course of action would be to use the CEMs data to derive 3 hour averages. Properly conducted fuel sampling may be an adequate substitute for the Manatee plant since it is permitted to burn only oil and gas. However, EPA realizes that conducting fuel analysis based on a 3 hour average would be too burdensome for the source. Given the relative consistency of the oil and gas fuel sources, 24 hour averaging of the fuel data may be sufficiently representative of the source's compliance with the 3 hour emission limit. Therefore, EPA is willing to accept a 24 hour averaging time for the fuel sampling analysis to ensure compliance with the applicable standard. The Region has accepted a 24 hour averaging time, which is still protective of the NAAQS, in other title V permits where the averaging time is not specified in the regulations. Please, refer to the Turkey Point Plant permit, condition A.19., for an example of an acceptable sampling protocol.

Based on the above information, DEP must revise the Manatee permit to either require that the fuel analysis be conducted on a daily basis, rather than a monthly basis, or require the use of the CEMs to determine compliance with this standard. Requiring that the CEMs be used for conducting

periodic monitoring imposes little or no additional burden on FP&L. Please, refer to the Riviera and Turkey Point permits. Even though use of CEMs are not the compliance method pursuant to the SIP, the State has required the use of the CEMs to ensure compliance with the same SIP SO<sub>2</sub> standard in those permits.

- (6) 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.
- (7) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in condition A.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.
- (8) Periodic Monitoring - Condition A.8 allows particulate matter emissions up to an average of 0.3 lbs. per million BTU heat input during a 3-hour period in any 24-hour period for soot blowing and load change. In addition, Condition A.6 allows visible emissions up to 60 percent opacity during soot blowing and load changes. A load change is defined to occur when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. There does not, however, appear to be any conditions that require the source to record the time, date, and duration of these events. The permit must require that the facility keep records of these events to ensure compliance with this requirement.

In addition to the above objections, our review has identified the following concern regarding the Manatee permit:

1. Section II, Facility-Wide Conditions

Condition 7. should be identified as "Not Federally Enforceable."