

Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 October 20, 1997

Virginia B. Wetherell Secretary

Mr. J. M. Parent Plant General Manager Florida Power & Light Company 11770 U.S. Highway One North Palm Beach, FL 33408

Re:

PROPOSED Title V Permit No.: 0810010-001-AV

Manatee Plant

Dear Mr. Parent:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Manatee Plant located at 19050 State Road 62, Parrish, Manatee County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit. We have not enclosed a printed copy of the PROPOSED permit since the changes made from the DRAFT permit were so minor.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is http://www.dep.state.fl.us/air.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA... If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Susan DeVore at 850/488-1344.

Sincerely,

C. H. Fancy, 1

Chief

Bureau of Air Regulation

CHF/sd

Enclosures

copy furnished to:

Mr. William Reichel, FPL

Mr. Ronnie L. Adams, P.E., FPL

Mr. Richard G. Piper, FPL

Mr. Kennard F. Kosky, P.E., Golder Assoc.

Hon. Joe McClash, Manatee Co. Commission

Ms. Yolanda Adams & Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)

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Mr. Bill Thomas, P.E., DEP SW District, Air Section

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Page 1 of 2

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Florida Power & Light Company for the Manatee Plant located at 19050 State Road 62, Parrish, Manatee County was clerked on August 22, 1997. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Tampa Tribune on September 4, 1997 by the Department. The DRAFT Title V Air Operation Permit was available for public inspection at the Southwest District in Tampa and the permitting authority's office in Tallahassee.

II. Public Comment(s).

Comments from the applicant were received on September 18, 1997 and the DRAFT Title V Operation Permit was changed. The comments were not considered significant enough to reissue the DRAFT Title V Permit and require another Public Notice.

Per a teleconference with the applicant to discuss its comments on September 19, 1997 the following changes were made:

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of ..., equipped with multiple cyclones, a flue gas recirculation system and staged combustion. Each operates a Westinghouse tandem compound, reheat-type extraction turbine.

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

Each emissions unit consists of a boiler which drives a turbine generator. Emissions are controlled with multiple cyclones, a flue gas recirculation system and staged combustion. Each unit is equipped with a 499 foot stack.

Other revisions made are as follows:

A.9. Sulfur Dioxide. ... [Rules 62-213.440 and 62-296.405(1)(c)1.g., F.A.C.]

PROPOSED PERMIT DETERMINATION

Page 2 of 2

- **A.17.** <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing. ...
 - 4. ...:
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 100 tons per year or more of any other regulated air pollutant; and
- **A.24.** For each emissions unit, the following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard:
 - a. Determine and record monthly the as-fired fuel sulfur content, percent by weight, for liquid fuels fired using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the as-fired fuel. As-fired fuel oil heating value, density or specific gravity, and the percent sulfur content shall be determined by taking a daily sample of the fuel fired, combining those samples into a monthly composite, and analyzing a representative sample of the composite.
 - b. Record daily the amount of each fuel fired, and the density or specific gravity, the heating value, and the percent sulfur content by weight of the fuel fired derived from the monthly analysis.
 - c. Calculate and record the daily average sulfur dioxide emissions in pounds per hour (or tons per hour) and pounds per million Btu, using the records above.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.34. Sulfur Dioxide Emission Report... The owner or operator shall, by the thirtieth day following each calendar quarter, submit to the Department's Southwest District, Air Section, a summary report of the daily averages of sulfur dioxide emissions in pounds per hour (or tons per hour) and pounds per million Btu, for each month of the preceding calendar quarter. The report shall include the quantities of each fuel fired and document the heating value, density or specific gravity, and the percent sulfur content of the fuel fired. [Rule 62-4.070(3) and 62-213.440, F.A.C., AO 41-204804 Specific Condition 6, AO 41-219341 Specific Condition 6]

Informal comments were received from EPA on September 29, 1997. The Department elected to make no changes in response to these comments.

Document(s) on file with the permitting authority:

Comment letter received September 18, 1997, from Mr. Giarrusso.

Informal comments received September 29, 1997 by e-mail from EPA.

Letter received October 14, 1997, from Mr. Parent revising the application to remove reference to fly ash reinjection.

III. Conclusion.

The permitting authority will issue the PROPOSED Permit No.: 0810010-001-AV, with any changes noted above. Since the changes were so minor, a copy of the PROPOSED permit has not been printed and mailed to the applicant.





September 3, 1997

Mr. W. Douglas Beason, Esquire Assistant General Counsel Office of General Counsel State of Florida Department of Environmental Protection 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

RE: Manatee Power Plant

Notice of Intent to Issue Proposed DRAFT Permit No. 0810010-001-AV

Manatee County, Florida

Dear Mr. Beason:

On August 27, 1997, Florida Power and Light Company (FPL) received the referenced Notice of Intent to Issue Proposed Permit for its Manatee Power Plant located in Manatee County, Florida. The Notice of Intent will be issued by the Department and is signed by G.H.Fancy, P.E., Chief of the Bureau of Air Regulation.

FPL has been working in good faith with the Department to identify and resolve outstanding permit issues regarding FPL Title V facilities over the past several months. The Department and FPL agree that more time is needed to complete the permitting process for this facility. FPL hereby requests, pursuant to Rule 62-103.070, F.A.C., an extension to and including September 19, 1997, in which to file a petition for administrative proceedings. Furthermore, FPL requests public notice be delayed until September 19, 1997.

This request is filed simply as a protective measure to avoid waiver of FPL's right to challenge the permit as issued. Granting of this request will not prejudice either party, but will further their mutual interests and likely avoid the need to initiate formal administrative proceedings.

I hereby certify that I have contacted Mr. Joseph Kahn ,P.E., regarding this request, and he has no objection to this request for extension of time.

Accordingly, I hereby request that you formally extend the time for filing of a petition for administrative proceedings to and including September 19, 1997.

Sincerely,

Vito J. Giarrusso

Environmental Specialist

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BUREAU OF AIR REGULATION

cc: Joseph Kahn, FDEP Tallahassee

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:

- 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. 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 nonsootblowing 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.'

- Obviation 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 SO₂ 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 SO2 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 SO₂ standard which we understand to be in place to ensure compliance with the National Ambient Air Quality Standards (NAAQS). 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. 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_2 standard in those permits.

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 in not related to activities that may be considered "insignificant" under the title V program.

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- (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.
- Periodic Monitoring Condition A.8 allows particulate (8) 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 There does not, however, appear to be any minute or more. 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."

Enclosure 1

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

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 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 nonsootblowing 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 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.

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Section II, Facility-Wide Conditions
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Date:

10/31/97 8:53:04 AM Elizabeth Walker TAL

From: Subject:

New Posting

To:

See Below

There is a new posting available on the Florida Website

Florida Power and Light MANATEE PLANT

0810010001AV

Proposed

The notification letter is encoded and attached. If you have any questions, please let me know.

Thanks, Elizabeth