

Jeb Bush Governor

Department of **Environmental Protection**

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

PROPOSED Permit Electronic Posting Courtesy Notification

Florida Power & Light Company
Manatee Power Plant
Facility ID No.: 0810010
Manatee County

Title V Air Operation Permit **PROPOSED Permit No.:** 0810010-008-AV

The electronic version of the PROPOSED permit was posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review on September 27, 2002.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is November 10, 2002. If an objection (veto) is received from USEPA, the permitting authority will provide a copy of the objection to the applicant.

Provided an objection is not received from USEPA, the PROPOSED permit will become a FINAL permit by operation of law on the 55th day after the permit posting date. Day 55 is November 20, 2002.



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

September 26, 2002

Mr. Paul Plotkin, Plant General Manager Florida Power and Light, Manatee Power Plant 19050 State Road 62 Parrish, FL 34219

Re:

FPL Manatee Power Plant

PROPOSED Title V Permit Revision No. 0810010-008-AV

Addition of Natural Gas for Units 1 and 2

Dear Mr. Plotkin:

One copy of the "<u>PROPOSED PERMIT DETERMINATION</u>" for the FPL Manatee Power Plant located in Manatee County is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

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permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.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 Jeff Koerner at 850/921-9536.

Sincerely,

A. A. Linero, P.E.

Bureau of Air Regulation

AAL/SMS/jfk

Enclosures

cc:

Internet Email Memorandums to the following:

Mr. Gregg Worley, EPA Region 4

PROPOSED PERMIT DETERMINATION

FPL Manatee Power Plant
PROPOSED Title V Permit Revision No. 0810010-008-AV
Addition of Natural Gas for Units 1 and 2

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" for the FPL Manatee Power Plant located in Manatee County was clerked on July 9, 2002. This package included modifications of construction permit conditions concurrent with the revised Title V operation permit. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published on July 15, 2002 in the Bradenton Herald. The DRAFT Title V Air Operation Permit was available for public inspection at the Department's Southwest District Office in Tampa and the Bureau of Air Regulation's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on July 18, 2002.

II. Comments on the Draft Permit.

The Department received no comments regarding the Draft Permit from the public, the Department's Southwest District Office, the EPA Region 4 Office, the National Park Service, or the Fish and Wildlife Service Office. The applicant requested minor changes to the permit that would reflect the final air construction permit modification previously issued. The applicant requested an extension of time in which to file for an administrative hearing on July 23, 2002 and August 21, 2002. The following summarizes the applicant's comments and the Department's response.

- 1. Request: Amend permit to reflect the minor changes made to final air construction Permit No. 0810010-007-AC. Response: The Department agreed and revised accordingly.
- 2. Request, Condition A.3: Remove the following sentence, "When available, the Department strongly encourages the permittee to fire natural gas as a clean-burning alternative to fuel oil." It is not an enforceable requirement. Response: The Department did not agree to the change as this requirement was included in final air construction Permit No. 0810010-007-AC.
- 3. Request, Condition A.9: Consistent with final air construction Permit No. 0810010-007-AC, move the text identifying the fuel sulfur content to the permitting note. Response: The Department agreed and revised the condition to be consistent with final air construction Permit No. 0810010-007-AC.
- 4. Request, Condition A.16: Delete paragraph "c" because there is no requirement to monitor heat input except during compliance testing. Response: The Department did not agree to the change, as this requirement was included in final air construction Permit No. 0810010-007-AC.
- 5. Request, Condition A.24: Consistent with final air construction Permit No. 0810010-007-AC, delete the 4th paragraph related to monthly record keeping for the sulfur content of natural gas. Response: The Department agreed and revised the condition to be consistent with final air construction Permit No. 0810010-007-AC.
- 6. Request, Conditions A.39 and A.40: Revise conditions to be consistent with final air construction Permit No. 0810010-007-AC. Response: The Department agreed. No change was necessary for Condition No. A.39. Condition No. A.40 was revised consistent with the minor changes made to Condition Nos. 11, 13, 14, and 18 in final air construction Permit No. 0810010-007-AC. The following summarizes these changes.
 - The reporting deadline was revised from March 1st to August 1st of each year. This is necessary because EPA must review and approve the final annual emissions of nitrogen oxides and sulfur dioxide for the acid rain program.
 - The annual emissions of nitrogen oxides were corrected from 8179 to 8762 tons per year based on the final emissions approved by EPA.
 - The condition was clarified to indicate that initial "compliance" tests are required only for particulate matter and opacity. Initial tests for carbon monoxide and volatile organic compounds are required to establish emission factors for reporting purposes.
 - The condition was clarified as follows to indicate the basis for reporting annual emissions from gas firing in the PSD Applicability Report: initial test for particulate matter and volatile organic compounds; initial and annual (during annual NOx RATA) tests for carbon monoxide; and CEMS data for emissions of nitrogen oxides and sulfur dioxide as indicated by the EPA Scorecard values for the acid rain program.

PROPOSED PERMIT DETERMINATION

- The condition was clarified as follows to indicate the basis for reporting annual emissions from oil firing in the PSD Applicability Report: emissions data for carbon monoxide, particulate matter, and volatile organic compounds as reported in the certified Annual Operating Reports; and CEMS data for emissions of nitrogen oxides and sulfur dioxide as indicated by the EPA Scorecard values for the acid rain program.
- Consistent with the previous fuel sulfur changes, the requirement to keep fuel sulfur records for natural gas was removed.
- 7. Request, Appendix S, Table 1-1: Consistent with the previous fuel sulfur changes, remove the fuel sulfur specification and associated "equivalent emissions". Response: The Department agreed and revised accordingly.
- 8. Request, Appendix S, Table 2-1: Delete the annual PM and VE testing for gas firing. Response: The Department agreed and revised accordingly. Existing Condition Nos. A.18 and A.19 do not require testing for PM and VE "... while burning only gaseous fuel(s) ...". These condition references were added to the table.
- 9. Request, Appendix H-1: Delete reference to air construction Permit No. 0810010-006-AC as it is pending and relates to the proposed Unit 3 and not Units 1 and 2. Revise reference for Permit No. 0810010-007-AC from draft to final. Response: The Department agreed and revised accordingly.

Based on the minor changes noted above, the applicant withdrew the requests for an extension of time in which to file for an administrative hearing on September 16, 2002.

III. Conclusion.

The Department hereby issues the PROPOSED PERMIT for this project, which is a revision of Initial Title V Permit No. 0810010-001-AV, as amended.

STATEMENT OF BASIS

FPL Manatee Power Plant PROPOSED Permit No. 0810010-008-AV Revision of Title V Air Operation Permit No. 0810010-001-AV

PERMITTEE

Florida Power and Light Company - Manatee Power Plant 19050 State Road 62 Parrish, FL 34219

FACILITY DESCRIPTION

This facility consists of two fossil fuel steam generators, Unit 1 and Unit 2, each rated at 800 megawatts (MW) (900 MW gross capacity) output. The steam generators each burn a variable combination of No. 6 fuel oil, No. 2 fuel oil, propane, and used oil from FPL operations, discharging pollutants through a stack 499 feet above ground level. Each unit is a Foster-Wheeler oil fired steam generator, equipped with multiple cyclones, a flue gas recirculation system, staged combustion, and low-NOx burners. Each operates a Westinghouse tandem compound, reheat-type extraction turbine.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 12, 1996, this facility is a major source of hazardous air pollutants (HAPs).

PROJECT DESCRIPTION

The new Gulfstream Natural Gas Pipeline began commercial operation in June of 2002. The project brings natural gas that is compressed near Mobile Alabama and conveyed through an underwater pipeline on the continental shelf to markets in Florida. The new pipeline instantly increases the total natural gas transportation capacity into Florida from approximately 1.5 to 2.5 billion standard cubic feet, excluding Florida Gas Transmission Company's Phases V and VI projects. The pipeline enters Florida in Manatee County at a location that is particularly convenient to the FPL Manatee Plant.

As a direct result of the new pipeline, the FPL proposes to construct the infrastructure necessary to fire natural gas in existing fossil fuel fired steam generator Units 1 and 2. The request is being reviewed as an application for an air construction permit (No. 0810010-007-AC) and a concurrent revision to initial Title V air operation Permit No. 0810010-001-AV. FPL predicts that the addition of natural gas will not result in PSD-significant net emissions increases for any pollutant and therefore PSD does not apply. This procedure is available to operators of electric utility steam generating units and is allowed in accordance with the provisions of Rule 62-210.200(11)(d), F.A.C. and 40 CFR 52.21(b)(33). Based on the information provided by the applicant and the annual emissions estimates, the Department determines that the addition of natural gas is not likely to cause an increase in annual emissions from the plant. The PROPOSED Title V permit includes the following revisions:

- The Table of Contents and permit pages were renumbered accordingly.
- Natural gas is added throughout as an authorized fuel. See miscellaneous equipment descriptions throughout and revisions to existing Specific Condition Nos. A.1, A.3, A.9, A.16, A.24, Table 1-1, and Table 2-1.
- The maximum heat input from firing natural gas is identified as 5670 mmBtu per hour, as requested by the applicant. See emissions units description and Specific Condition A.1.
- Added new Specific Condition No. A.38, which added construction notifications regarding the gas project.
- Added new Specific Condition No. A.39, which requires initial compliance testing for particulate matter and opacity when firing natural gas.

STATEMENT OF BASIS

- Added new Specific Condition No. A.39, which requires record keeping verify that the natural gas project was not subject to PSD.
- Changes to the current opacity, particulate matter, and nitrogen oxides emissions standards were not required.
- Updates Specific Condition No. A.27, Specific Condition No. A.35, Table 1-1, and Table 2-1 consistent with the administrative permit correction issued on July 16, 1998.
- Updates Specific Condition No. A.35 consistent with the administrative permit correction issued on September 14, 1998.
- Appendix H-1, "Permit History", was brought up to date.

CHANGES TO THE DRAFT PERMIT

Consistent with final air construction Permit No. 0810010-007-AC, minor changes were made to the draft permit. See the attached "PROPOSED PERMIT DETERMINATION" for a summary of the changes.

AGENCY ACTION

Subject to the minor changes noted above, the PROPOSED Title V air operation permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213 of the Florida Administrative Code (F.A.C.).

Florida Power & Light Company Manatee Power Plant Facility ID No. 0810010 Manatee County

Title V Air Operation Permit

PROPOSED Permit No. 0810010-008-AV

(Revision to Initial Title V Air Operation Permit No. 0810010-001-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

> Telephone: 850/488-0114 Fax: 850/922-6979

Initial Title V Air Operation Permit **PROPOSED Permit No.** 0810010-008-AV

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Permittee:

Florida Power & Light Company

PROPOSED Permit No. 0810010-008-AV
Facility ID No. 0810010
SIC Nos. 49, 4911
Project: Revised Title V Air Operation Permit

This permit is for the operation of the Manatee Plant. This facility is located at 19050 State

Road 62, Parrish, Manatee County; UTM Coordinates: Zone 17, 367.250 km East and 3054.150

km North; Latitude: 27° 36' 21" North and Longitude: 82° 20' 44" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Previous administrative permit corrections incorporated into revised Title V permit:

Notice of Administrative Permit Correction dated 07/16/98 Notice of Administrative Permit Correction dated 09/14/98

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix I-1, List of Insignificant Emissions Units and/or Activities Appendix TV-1, Title V Conditions (version dated 12/02/97)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
Phase II Acid Rain Application/Compliance Plan received 12/6/95
Alternate Sampling Procedure: ASP Number 97-B-01
Order Granting Reduced Sampling Frequency, OGC Case Nos. 83-0580
and 83-0581, Order dated April 24, 1984
Order Extending Permit Expiration Date

Effective Date: January 1, 1999

Revision Date: DRAFT

Renewal Application Due Date: July 5, 2003

Expiration Date: December 31, 2003

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources Management

Florida Power and Light Company Manatee Plant Page 2 of 1<u>9</u>7

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two fossil fuel steam generators, Unit 1 and Unit 2, each rated at 800 megawatts (MW) (900 MW gross capacity) output. The steam generators each burn a variable combination of <u>natural gas</u>. No. 6 fuel oil, No. 2 fuel oil, propane, and used oil from FPL operations, discharging pollutants through a stack 499 feet above ground level. Each unit is a Foster-Wheeler oil fired steam generator, equipped with multiple cyclones, a flue gas recirculation system and staged combustion. Each operates a Westinghouse tandem compound, reheat-type extraction turbine.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 12, 1996, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

| E.U. ID | , |
|----------|-----------------------------------------------------------------------------|
| No. | Brief Description |
| 001 | Fossil Fuel Steam Generator, Unit 1 |
| 002 | Fossil Fuel Steam Generator, Unit 2 |
| Unregula | ted Emissions Units and/or Activities |
| 003 | Emergency Diesel Generator, Miscellaneous Mobile Equipment and Internal |
| | Combustion Engines |
| 004 | Painting of Plant Equipment and Non-halogenated Solvent Cleaning Operations |

Please reference the Permit No., Facility ID No., and appropriate Emissions Units ID Nos. on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only: Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 12, 1996

Additional Information Request dated May 13, 1997

Additional Information Response received August 15, 1997

DEP Letter to US EPA Region 4 dated March 10, 1998

US EPA Region 4 letter to DEP received March 25, 1998

Air Permit No. 0810010-007-AC issued on August 12, 2002

Florida Power and Light Company Manatee Plant Page 3 of 1<u>9</u>7

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

- 1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
- 2. Not Federally Enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
 [Rule 62-296.320(4)(b)1. & 4, F.A.C.]
- 4. <u>Prevention of Accidental Releases (Section 112(r) of CAA)</u>. If required by 40 CFR 68, the permittee shall submit to the implementing agency:
- a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
 b. certification forms and/or RMPs according to the promulgated rule schedule.
 [40 CFR 68]
- 5. <u>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of <u>Insignificant Emissions</u> Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
- 7. Not Federally Enforceable. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. The owner or operator shall:
 - a. Tightly cover or close all VOC or OS containers when they are not in use.
 - b. Tightly cover all open tanks which contain VOC or OS when they are not in use.
 - c. Maintain all pipes, valves, fittings, etc., which handle VOC or OS in good operating condition.
 - d. Immediately confine and clean up VOC or OS spills and make sure wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1)(a), F.A.C.]

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- **8.** Not Federally Enforceable. 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. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - a. The facility shall construct temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.
 - b. Maintenance of paved areas as needed.
 - c. Regular mowing of grass and care of vegetation.
 - d. Limiting access to plant property by unnecessary vehicles.
 - e. Bagged chemical products are stored in concrete block buildings until they are used.
 - f. Spills of powdered chemical products are cleaned up as soon as practicable.
 - g. During construction, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C., proposed by the applicant in the initial Title V permit application received June 12, 1996]

- 9. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-1, Title V Conditions} [Rule 62-214.420(11), F.A.C.]
- 11. <u>Submittals</u>. All reports, tests, notifications or other submittals required by this permit shall be submitted to the Department's Southwest District, Air Section:

Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, FL 33619-8218 Telephone: 813/744-6100

Fax: 813/744-6458

Any reports, data, notifications, certifications and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Operating Permits Section 61 Forsyth Street Atlanta, GA 30303 Phone: 404/562-9099

Fax: 404/562-9095

Section III. Emissions Units and Conditions.

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

| E.U. ID | |
|---------|-------------------------------------|
| No. | Brief Description |
| 001 | Fossil Fuel Steam Generator, Unit 1 |
| 002 | Fossil Fuel Steam Generator, Unit 2 |

Fossil fuel fired steam generators Unit 1 and Unit 2 are each nominal 800 megawatt (900 MW gross capacity) (electric) steam generators designated as Manatee Plant Unit 1 and Unit 2. The emissions units are fired on a variable combination of <u>natural gas</u>, No. 6 fuel oil, No. 2 fuel oil, propane, and used oil from FPL operations. Propane is utilized primarily for ignition of the main fuel. When firing fuel oil <u>(or combinations of authorized fuels)</u>, the maximum heat input for each boiler is 8650 mmBtu per hour. <u>When firing natural gas alone</u>, the maximum heat input for each boiler is 5670 MMBtu per hour.

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. <u>The twin register low-NOx burners (ABB Combustion Services, Ltd.) are dual fuel with mechanical atomization for oil firing.</u> Each unit is equipped with a 499 foot stack.

{Permitting notes: These emissions units are regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator Unit 1 began commercial operation in 1976 and fossil fuel fired steam generator Unit 2 began commercial operation in 1977. These emissions units may inject additives such as magnesium oxide, magnesium hydroxide and related compounds into each boiler.}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum operation heat input rates are as follows:

| Unit No. | mmBtu/hr Heat Input | Fuel Type |
|----------|---------------------|----------------------------------------------|
| 1 | 8650 | No. 2 or 6 Fuel Oil (Alone or w/Natural Gas) |
| , | <u>5670</u> | Natural Gas (Alone) |
| 2 | 8650 | No. 2 or 6 Fuel Oil (Alone or w/Natural Gas) |
| | 5670 | Natural Gas (Alone) |

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; Permit No. 0810010-007-AC]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

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A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.26 and A.27 of this permit.

[Rule 62-297.310(2), F.A.C.]

- A.3. Methods of Operation Fuels.
 - a. Startup: The only fuels allowed to be burned are any combination of <u>natural gas</u>, No. 6 fuel oil, No. 2 fuel oil and propane.
 - b. Normal: The only fuels allowed to be burned are any combination of <u>natural gas</u>, No. 6 fuel oil, No. 2 fuel oil, propane and on-specification used oil from FPL operations.

When available, the Department strongly encourages the permittee to fire natural gas as a clean-burning alternative to fuel oil.

[Rule 62-213.410, F.A.C.; Permit No. 0810010-007-AC]

A.4. Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.5. <u>Visible Emissions</u>. Visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions standard shall compliance test for particulate matter emissions annually.

[Rule 62-296.405(1)(a), F.A.C.; and OGC Case Nos. 83-0580 & 83-0581, Order dated April 24, 1984.]

A.6. <u>Visible Emissions - Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs 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.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition. [Rule 62-210.700(3), F.A.C., Note: these units have operational continuous opacity monitors.]

- A.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(b), F.A.C.]
- A.8. Particulate Matter Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- A.9. <u>Sulfur Dioxide</u>. The sulfur content of fuel oils burned shall not exceed 1.0 percent by weight, as received at the plant. <u>The blending of natural gas shall not be used to demonstrate</u>

Florida Power and Light Company Manatee Plant Page 7 of 1<u>9</u>7

compliance with the sulfur dioxide standard for "liquid fuel" in Rule 62-296.405(c), F.A.C. See specific conditions A.9, A.15, A.23 and A.24 of this permit.

{Permitting Note: The maximum fuel sulfur content of pipeline natural gas is 10 grains of sulfur per 100 standard cubic feet of natural gas. However, pipeline natural gas typically contains less than 1 grain of sulfur per 100 SCF of natural gas.}

[Rules 62-213.440 and 62-296.405(1)(c)1.g., F.A.C., and applicant agreement with EPA on March 3, 1998, and Permit No. 0810010-007-AC]

A.10. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 0.30 pounds per million Btu heat input. Compliance shall be demonstrated based on a 30-day rolling average as measured by a continuous emission monitoring system (CEMS). The CEMS must meet the performance specifications contained in 40 CFR 75.

[Rules 62-296.405(1)(d)2. and (1)(d)4., F.A.C., AO 41-204804 and AO 41-219341, Issued August 30, 1993]

Excess Emissions

- A.11. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- A.12. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[Rule 62-210.700(2), F.A.C.]

A.13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

A.14. Annual Tests Required. Except as provided in specific conditions A.17 through A.19 of this permit, emission testing for particulate emissions and visible emissions shall be performed annually, each federal fiscal year, except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service.

[Rules 62-4.070(3) and 62-213.440, F.A.C.]

A.15. <u>Sulfur Dioxide</u>. The permittee elected to demonstrate compliance using fuel sampling and analysis. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions A.9, A.23 and A.24 of this permit. [Rule 62-296.405(1)(f)1.b., F.A.C.]

A.16. Determination of Process Variables.

(a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

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- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
- (c) The permittee shall install, operate, and maintain a system to continuously monitor and record the amount of natural gas consumption and heat input. This system shall be designed to interact with the existing continuous emissions monitors.

[Rule 62-297.310(5) and 62-4.070(3), F.A.C.; Permit No. 0810010-007-AC]

- A.17. Frequency of Compliance Tests. 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.
 - 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 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
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to

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believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C., SIP approved]

- **A.18.** When VE Tests Not Required. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
 - a. only gaseous fuel(s); or
 - b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year. [Rule 62-297.310(7)(a)4., F.A.C.]
- **A.19.** When PM Tests Not Required. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:
 - a. only gaseous fuel(s); or
 - b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

 [Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- A.20. <u>Visible emissions</u>. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition A.21 of this permit. VE testing shall be conducted in accordance with the requirements of specific condition A.27 of this permit. [Rule 62-296.405(1)(e)1., F.A.C.]
- A.21. <u>DEP Method 9</u>. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

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- 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
- 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]

- A.22. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. Particulate testing shall be conducted in accordance with the requirements of specific conditions A.26 and A.27 of this permit. [Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]
- A.23. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance using fuel sampling and analysis. See specific conditions A.9 and A.24 of this permit.

 [Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.]

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A.24. 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:

Compliance with the liquid fuel sulfur limit shall be verified by a fuel analysis provided by the vendor or performed by FPL upon each fuel delivery at the Port Manatee Fuel Oil Terminal with the following exception: in cases where No. 6 fuel oil is received with a sulfur content exceeding 1.0 percent by weight, and blending at the terminal is required to obtain a fuel mix equal to the applicable percent sulfur limit, an analysis of a fuel sample representative of fuel from the fuel storage tanks shall be performed by FPL prior to transferring oil to the Manatee plant. Reports of percent sulfur content of these analyses shall be maintained at the power plant facility.

The owner or operator shall maintain records of the as-fired fuel oil heating value, density or specific gravity, and the percent sulfur content. Fuel sulfur content, percent by weight, for liquid fuels shall be determined by 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 fuel oil.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.; applicant agreement with EPA on March 3, 1998;]

A.25. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.26. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.27. Operating Conditions During Testing - PM and VE. When required, testing for particulate matter and visible emissions shall be conducted while firing No. 6 fuel oil at the maximum allowable rate of 8650 million Btu per hour, except as provided below. Particulate and visible

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emissions shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting additives consistent with normal operating practices.

Testing may be conducted while firing No. 6 fuel oil at less than 90 percent of the maximum allowable rate; however, subsequent emissions unit operation is limited as described in specific condition A.26 of this permit.

[Rules 62-4.070(3) and 62-213.440 F.A.C., AO 41-204804 Specific Condition 5, AO 41-219341 Specific Condition 5]

A.28. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

A.29. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached to this permit).
- (e) <u>Allowed Modification to EPA Method 5</u>. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **A.30.** Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]
- **A.31.** Testing While Injecting Additives. The owner or operator shall conduct emission tests while injecting additives consistent with normal operating practices. [Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998]

Record Keeping and Reporting Requirements

A.32. Excess Emissions - Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Southwest District, Air Section, in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Southwest District, Air Section.

[Rule 62-210.700(6), F.A.C.]

A.33. Excess Emissions - Reports. Submit to the Department's Southwest District, Air Section, a written report of emissions in excess of emission limiting standards for opacity and sulfur dioxide as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

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

A.34. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's Southwest District, Air Section, on the results of each such test.
- (b) The required test report shall be filed with the Department's Southwest District, Air Section, as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's Southwest District, Air Section, to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.

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- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

A.35. Fuel Analysis Report. The owner or operator shall, by the fifteenth day following each calendar month, submit to the Department's Southwest District, Air Section, a report of fuel analyses that are representative of each fuel received in the preceding month. The report shall document the heating value, density or specific gravity, and the percent sulfur content by weight of each 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]

A.36. COMS for Periodic Monitoring. The owner or operator is required to install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring.

[Rule 62-213.440, F.A.C., and applicant agreement with EPA on March 3, 1998]

Miscellaneous Conditions

A.37. <u>Used Oil</u>. Burning of on-specification used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. On-specification Used Oil Allowed as Fuel: This permit allows the burning of used oil fuel meeting EPA "on-specification" used oil specifications, with a PCB concentration of less than 50 ppm, originating from FPL operations. Used oil that does not meet the specifications for on-specification used oil shall not be burned at this facility.

On-specification used oil shall meet the following specifications: [40 CFR 279, Subpart B.]

Arsenic shall not exceed 5.0 ppm; Cadmium shall not exceed 2.0 ppm;

Chromium shall not exceed 10.0 ppm;

Lead shall not exceed 100.0 ppm;

Total halogens shall not exceed 1000 ppm;

Flash point shall not be less than 100 degrees F.

- b. Quantity Limited: The maximum total quantity of used oil that may be burned in both emissions units is 40,000 gallons in any consecutive 12-month period.
- c. <u>Used Oil Containing PCBs Not Allowed:</u> Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- d. PCB Concentration of 2 to less than 50 ppm: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.
- e. <u>Testing Required</u>: The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods), latest edition.

Split samples of the used oil shall be retained for three months after analysis for further testing if necessary.

[AO 41-204804 Specific Condition 9, and AO 41-219341 Specific Condition 9]

- f. Record Keeping Required: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department: [40 CFR 279.61 and 761.20(e)]
 - (1) The gallons of on-specification used oil received and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
 - (2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)
 - (3) Results of the analyses required above.
- g. Reporting Required: The owner or operator shall submit to the Department's Southwest District, Air Section, within thirty days of the end of each calendar month in which used oil is burned, the analytical results and the total amount of on-specification used oil burned during the previous calendar month

The owner or operator shall submit, with the Annual Operation Report form, the analytical results and the total amount of on-specification used oil burned during the previous calendar year.

[Rules 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted]

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- A.38. Construction Notifications: Within 15 days of beginning construction, the permittee shall notify the Compliance Authority that construction has commenced. Within 15 days of completing construction, the permittee shall notify the Compliance Authority that construction has concluded. Each notification shall include an updated proposed schedule of activities through the initial shakedown period and the firing of natural gas. [Rule 62-4.070(3), F.A.C.; Permit No. 0810010-007-AC]
- A.39. Initial Compliance Tests for Gas Firing: When firing 100% natural gas, the permittee shall conduct initial compliance tests to determine the emissions of particulate matter and level of opacity from Units 1 and 2. Test results shall demonstrate compliance with the applicable standards. A transmissometer calibrated in accordance with Rule 62-297.520, F.A.C., may also be used to demonstrate compliance with the visible emissions standard. Initial tests shall be conducted within 60 days after completing shakedown for each unit, but not later than 180 days after first fire on natural gas. [Rule 62-296.405(1)(e)1, F.A.C.; Permit No. 0810010-007-AC]
- A.40. PSD Applicability Report: Before August 1st of each year, the permittee shall submit a report to the Bureau of Air Regulation and the Compliance Authority summarizing actual annual emissions for the previous calendar year. The reports shall be used to verify the permittee's predictions of future representative actual annual emissions. The reports shall be submitted for five separate years that are representative of normal post-change operations after completing construction of the natural gas project. The reports shall begin during the first year that natural gas is fired and continue for five years. Reports are subject to the following conditions.

a. The Department determines the "past actual emissions" for Units 1 and 2 as follows:

| <u>Pollutant</u> | Past Actual Emissions Two-Year Average Tons per Year | Future Representative Actual Annual Emissions Calculation Methods |
|----------------------------------|------------------------------------------------------|-------------------------------------------------------------------|
| Carbon Monoxide (CO) | <u>18,987</u> | AOR (oil); Initial/Annual Performance Tests (gas) |
| Nitrogen Oxides (NOx) | <u>8762</u> | CEMS; Acid Rain Reporting |
| Particulate Matter (PM) | <u>2384</u> | AOR (oil); Initial Performance Test (gas) |
| Sulfur Dioxide (SO2) | <u>31,753</u> | CEMS; Acid Rain Reporting |
| Volatile Organic Compounds (VOC) | <u>149</u> | AOR (oil); Initial Performance Test (gas) |

"Past actual annual emissions" are based on: the two-year average for operation during 2000 and 2001; annual CO, PM, and VOC emissions reported in the certified Annual Operating Reports submitted by the permittee; and data collected by the Continuous Emissions Monitoring Systems for NOx and SO2 emissions as indicated by the EPA Scorecard values for the Acid Rain Program. "Future actual annual emissions" shall be based on: actual annual fuel combustion (heat input) rates; initial tested emission rates for PM (gas) and VOC (gas); a series of annual tested emission rates for CO (gas); certified Annual Operating Report data for CO (oil), PM (oil), and VOC (oil); and data collected by the Continuous Emissions Monitoring Systems for NOx and SO2 emissions

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as indicated by the EPA Scorecard values for the Acid Rain Program. The calculation methodology shall remain consistent from year to year.

- b. In accordance with 40 CFR 52.21(b)(33)(ii), the permittee shall, "Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole." The permittee shall identify and quantify the excluded emissions and present a justification for the exclusion.
- c. Each report shall compare the actual emissions for the given year with the past actual annual emissions as described above. If the difference between the current actual annual emissions and the past actual annual emissions defined above is greater than the PSD significant emission rates defined in Table 212,400-2 of Chapter 62-212, F.A.C., then Units 1 and 2 shall be subject to a full PSD review at that time. This review shall include a determination of the Best Available Control Technology (BACT) for each PSD-significant pollutant.

[Rules 62-204.800, 62-210.200(11) and 62-212.400, F.A.C.; 40 CFR 52.21(b)(33)(ii)]

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Section IV. This section is the Acid Rain Part.

Operated by:

Florida Power and Light Company

ORIS code:

6042

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Acid Rain, Phase II.

| E.U. ID | |
|---------|-------------------------------------|
| No. | Brief Description |
| 001 | Fossil Fuel Steam Generator, Unit 1 |
| 002 | Fossil Fuel Steam Generator, Unit 2 |

- **A.1.** The Phase II permit application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:
- a. DEP Form No. 62-210.900(1)(a), dated July 1, 1995. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- A.2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit are as follows:

| E.U. ID No. | EPA ID | Year | 2000 | 2001 | 2002 | 2003 |
|----------------|-------------------|------------------------------------------------------------------|--------|--------|--------|--------|
| 001 | ID No. 01 PMT1 | SO2 allowances, under Table 2 or 3 of 40 CFR Part 73 | 13654* | 13654* | 13654* | 13654* |
| 002 | ID No. 02 PMT2 | SO2 allowances, under Table 2 or 3 of 40 CFR Part 73 | 12581* | 12581* | 12581* | 12581* |

^{*} The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

- A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
 - 1. No permit revision shall be required for increase in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
 - 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]

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A.4. <u>Fast-Track Revisions of Acid Rain Parts</u>. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts. [Rule 62-213.413, F.A.C.]

A.5. Comments, notes, and justifications: None.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

Abbreviations and Acronyms:

°F: Degrees Fahrenheit

BACT: Best Available Control Technology

CFR: Code of Federal Regulations

DEP: State of Florida, Department of Environmental Protection

DARM: Division of Air Resource Management

EPA: United States Environmental Protection Agency

F.A.C.: Florida Administrative Code

F.S.: Florida Statute

ISO: International Standards Organization

LAT: Latitude LONG: Longitude

MMBtu: million British thermal units

MW: Megawatt

ORIS: Office of Regulatory Information Systems

SOA: Specific Operating Agreement **UTM**: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where: 40 reference to Title 40

CFR reference to Code of Federal Regulations

60 reference to Part 60

60.334 reference to Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213, F.A.C.]

Where: 62 reference to Title 62

62-213 reference to Chapter 62-213

62-213.205 reference to Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (continued)

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by permit tracking database

001 or 002 = 3-digit sequential project number assigned by permit tracking

database

Example: PSD-FL-185

PA95-01

AC53-208321

Where:

PSD= Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC = old Air Construction Permit numbering

Facility ID No. 0810010

Appendix I-1, List of Insignificant Emissions Units and/or Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

| | Brief Description of Emissions Units and/or Activities |
|----|----------------------------------------------------------------------------------------------------|
| 1. | Spent boiler chemical cleaning liquid evaporation. |
| 2. | Propane relief valves |
| 3. | Hydrazine mixing tank an relief valves. |
| 4. | Fuel oil storage tanks and related equipment. |
| 5. | Lube oil tank vents and extraction vents |
| 6. | Oil/water separators and related equipment |
| 7. | Miscellaneous mobile vehicle operation (cars, light trucks, heavy-duty trucks, backhoes, tractors, |
| | forklifts, cranes, etc.) |

Appendix H-1, Permit History/ID Number Changes

Permit History (for tracking purposes):

| E.U. | | | Issue | Expiration | Extended | Revised |
|--------|-------------------|-----------------------|------------------------------------------|-------------------------|----------------------|-----------------|
| ID No. | Description | Permit No. | Date | Date | Date ^{1, 2} | Date(s) |
| 001 | Fossil Fuel Steam | AO41-204804* | 08/30/93 | 01/14/97 | | 05/27/97 |
| | Generator, Unit 1 | <u>0810010-001-AV</u> | <u>05/29/98</u> | <u>12/31/03</u> | | |
| | 1 | <u>0810010-002-AV</u> | (Revised Initial App | olication) | | |
| | | <u>0810010-003-AV</u> | Title V Administrat | <u>ive Permit Corre</u> | <u>ction</u> | <u>07/16/98</u> |
| | , | <u>0810010-004-AV</u> | Title V Administrat | <u>ive Permit Corre</u> | <u>ction</u> | <u>09/14/98</u> |
| | | 0810010-005-AC | <u>12/22/99</u> | | | |
| | | <u>0810010-007-AC</u> | <u>08/12/02</u> | <u>07/01/03</u> | | |
| | | 0810010-008-AV | Revision of Title V | Permit No. 0810 | 010-001-AV | DRAFT |
| 002 | Fossil Fuel Steam | AO41-219341* | 08/30/93 | 01/14/97 | | 05/27/97 |
| | Generator, Unit 2 | 0810010-001-AV | <u>05/29/98</u> | 12/31/03 | | |
| | | 0810010-002-AV | (Revised Initial Application) | | | |
| | | 0810010-003-AV | Title V Administrative Permit Correction | | <u>07/16/98</u> | |
| | | <u>0810010-004-AV</u> | Title V Administrative Permit Correction | | <u>09/14/98</u> | |
| | 1 | <u>0810010-005-AC</u> | <u>12/22/99</u> | | | |
| | | 0810010-007-AC | <u>08/12/02</u> | <u>07/01/03</u> | | |
| | | 0810010-008-AV | Revision of Title V | Permit No. 0810 | 010-001-AV | DRAFT |

^{*} These permits were partially revised by Operation Permit Amendments, 0810010-002-AO.

ID Number Changes (for tracking purposes):

From: Facility ID No.: 40MAN410010

To: Facility ID No.: 0810010

Notes:

- 1 AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
- 2 AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96. {Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Appendix U-1, List of Unregulated Emissions Units and/or Activities

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

| E.U. ID | |
|---------|------------------------------------------------------------------------------------|
| No. | Brief Description of Emissions Units and/or Activity |
| 003 | Emergency Diesel Generator, Miscellaneous Mobile Equipment and Internal Combustion |
| | Engines |
| 004 | Painting of Plant Equipment and Non-halogenated Solvent Cleaning Operations |

Appendix S Permit Summary Tables

Table 1-1, Summary of Air Pollutant Emission Standards

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

| Emissions Unit | Brief Description |
|-----------------------|------------------------------------------------------------------------------|
| 001 | Fossil Fuel Steam Generator, Unit 1, heat input of 8650 mmBtu/hr on fuel oil |
| 002 | Fossil Fuel Steam Generator, Unit 2, heat input of 8650 mmBtu/hr on fuel oil |

| | | | Allowable Emis | sions | | Equivalent Emissions | | |
|--------------------------------------------|-----------------------------------------|-------------------|---------------------------------------------------------------------------------|---------|-----|-------------------------------|----------------------------------|-------------------------|
| Pollutant | Fuel(s) | Hours per Year | Standard(s) | lb/hour | TPY | lb/hour TPY | Regulatory Citations | See Permit Condition(s) |
| VE Steady State | <u>Gas,</u> Oil, Propane | 8760 | 40% opacity | | | | Rule 62-296.405(1)(a), F.A.C. | A.5 |
| VE Soot Blowing or Load Change | Gas, Oil, Propane | 8760 | 60 % opacity (>60% opacity for not more than 4, six- minute periods | | | | Rule 62-210.700(3), F.A.C. | A.6 |
| PM Steady State | <u>Gas/</u> Oil , Propane | 8760 | 0.1 lb/mmBtu | | | 865; 3,789) 865; 43* | Rule 62-296.405(1)(b), F.A.C. | A.7 |
| PM Soot Blowing or Load Change | Gas/Oil , Propane | 8760 | 0.3 lb/mmBtu | | | 2,595, 1,421, 2,595 (130*) | Rule 62-210.700(3), F.A.C. | A.8 |

^{*} The equivalent annual emissions for propane are based on the expected annual usage of propane reported by the applicant primarily as a startup fuel. Propane usage is not limited by this permit.

Appendix S Permit Summary Tables

Table 1-1, Summary of Air Pollutant Emission Standards, Continued

| Emissions Unit | Brief Description |
|-----------------------|-------------------------------------|
| 001 | Fossil Fuel Steam Generator, Unit 1 |
| 002 | Fossil Fuel Steam Generator, Unit 2 |

| | | | Allowable Emissions | | | Equivalent Emissions 1 | | |
|-----------------|----------|-------------------|---------------------|---------|-----|------------------------|---------------------------|-------------------------|
| Pollutant | Fuels | Hours per Year | Standard(s) | lb/hour | TPY | lb/hour: TPY/ | Regulatory Citations | See Permit Condition(s) |
| | | per Year | | | | | | Condition(s) |
| SO ₂ | Oil, | 8760 | 1.1 lb/mmBtu | | | 9,515 41,676 | Rules 62-213.440 & 62- | A.9 |
| | Propane | | | | | (oil) (oil) | 296.405(1)(c)1.g., F.A.C. | |
| NOx | Gas/Oil, | 8760 | 0.30 lb/mmBtu | | | 2,595, 11,366, | Rules 62-296.405(1)(d)2., | A.10 |
| | Propane | | | | | 2,712 | F.A.C. | |

Notes:

¹ The "Equivalent Emissions" listed are for informational purposes only. Equivalent emissions are for each emissions unit.

Appendix S **Permit Summary Tables**

Table 2-1, Summary of Compliance Requirements

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

| Emissions Unit | Brief Description |
|-----------------------|-------------------------------------|
| 001 | Fossil Fuel Steam Generator, Unit 1 |
| 002 | Fossil Fuel Steam Generator, Unit 2 |

| Pollutant or Parameter | Fuels | Compliance Method | Testing Frequency | Frequency Base Date ¹ | Minimum Compliance Test Duration | CMS ² | See Permit Condition(s) |
|---------------------------|----------------------|------------------------------|----------------------|-------------------------------------|----------------------------------|------------------|-----------------------------------|
| SO ₂ | Oil | Fuel sampling & analysis | As received | | | Yes | A.9, A.15, A.23 & A.24 |
| NO _x | Gas, Oil, Propane | Continuous Emissions Monitor | Continuous | | | Yes | A.10 |
| PM | Oil, Propane | Rule 62-296.405(1)(e)2 | Annual | July | 3 hours | | <u>A.19,</u> A.22, A.26 & A.27 |
| VE | Oil, Propane | DEP Method 9 | Annual | July | 1 hour | Yes | <u>A.18,</u> A.20, A.21 & A.27 |
| On-spec. Used Oil | | Record Keeping and Analysis | As fired | | | | A.37 |

Notes:

¹ Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. ² CMS = continuous monitoring system

Note: Copies of Appendix TV-1 and Appendix SS-1 will be provided to the permittee with the final permit. These documents may be viewed at the Department's web site at:

http://www.dep.state.fl.us/air/permitting/tvappendices.htm

for AR-Mantee

AGREEMENT FOR THE PURPOSE OF ENSURING COMPLIANCE WITH AMBIENT AIR QUALITY STANDARDS FOR OZONE

This Agreement is entered into between the Florida Department of Environmental Protection ("FDEP") and Florida Power & Light Company ("FPL") to reduce emissions of nitrogen oxides from an existing electrical generating facility for the exclusive purpose of ensuring compliance with the ambient air quality standards for ozone, as provided for by Section 366.8255(1)(d)7, Florida Statutes (2002).

WHEREAS:

- I. The Florida Legislature enacted Chapter 2002-276, Laws of Florida, to allow agreements between electric utilities and FDEP for the purpose of ensuring compliance with ozone ambient air quality standards, and further to provide for the recovery of costs and expenses prudently incurred by an electric utility pursuant to such an agreement entered into prior to October 1, 2002;
- II. FDEP has the statutory duty and authority, pursuant to Chapter 403, Florida Statutes, and rules adopted under Chapter 62, Florida Administrative Code, to protect and maintain Florida's air quality, including ensuring compliance with ambient air quality standards for ozone;
- III. The U.S. Environmental Protection Agency ("U.S. EPA") has promulgated a new ambient air quality standard for ozone that establishes a permissible limit on the level of ozone during any 8-hour period;
- IV. Manatee County is located in the vicinity of the Tampa Bay Airshed, which has experienced recent episodes of elevated ozone levels higher than the U.S. EPA's new ambient air quality standard for ozone on at least 15 separate days in the past four years;

- V. Nitrogen oxides emissions from electrical generating facilities owned by electric utilities can contribute to the formation of ozone in the vicinity of an electrical generating facility;
- VI. Based upon the best available information, including ambient air quality monitoring data, it is not clear whether the Tampa Bay Airshed will be in compliance with the 8-hour ozone standard in 2004/2005.
- VII. FPL is an electric utility that owns and operates an electrical generating facility known as the Manatee Plant, located in unincorporated Manatee County, Florida, comprised of two 800 megawatt class fossil fuel-fired generating units known as Manatee Units 1 and 2 or jointly as "the facility";
- VIII. FPL is regulated by the Florida Public Service Commission, and the Manatee Plant provides electric power to consumers in FPL's service area;
- IX. Manatee Units 1 and 2 emit nitrogen oxides, a precursor to regional ozone formation, into the atmosphere of Manatee County and surrounding areas, including the Tampa Bay Airshed;
- X. The Manatee Plant, together with other regional power plants, commercial and industrial activities, and transportation, are the main sources of nitrogen oxides affecting regional ozone formation in the Tampa Bay Airshed;
- XI. FPL has identified a nitrogen oxides emissions control technology known as "reburn" that is a "pollution prevention" system, which can reduce nitrogen oxides emissions from Manatee Units 1 and 2 without the use of reagents, catalysts, pollution collection or removal equipment;
- XII. Use of the proposed reburn emissions control technology in Manatee Units 1 and 2 will require FPL to incur certain costs and expenses to install, operate and maintain that control technology; and,
 - XIII. Installation of reburn technology in FPL's Manatee Units 1 and 2 and the

achievement of an emissions rate of no greater than 0.25 pounds per million BTU on a 30-day rolling average basis will help to ensure that the Tampa Bay Airshed will comply with the ozone ambient air quality standards established by U.S. EPA and by FDEP.

NOW THEREFORE, in consideration of the premises and mutual agreements contained herein, and intending to be legally bound, FDEP and FPL hereby agree as follows:

- 1. This Agreement is entered into by FDEP and FPL for the exclusive purpose of ensuring compliance with ozone ambient air quality standards.
- 2. This Agreement is in full force and effect upon the signature of both parties unless the Florida Public Service Commission (FPSC) does not issue a final order authorizing FPL to recover the costs incurred pursuant to this Agreement through the Environmental Cost Recovery Clause within 120 days of the execution of the Agreement at which time the parties may mutually agree, in writing, to extend the Agreement. In the event the FPSC does not issue a final order within 120 days of the execution of the Agreement and the parties do not mutually agree to extend the Agreement, the Agreement becomes null and void. A final order is one that is no longer subject to review or appeal by a court of competent jurisdiction. FPL will exercise good faith in seeking approval of such cost recovery from the FPSC in a timely manner. FDEP agrees to support FPL's request for such approval by the FPSC. FDEP and FPL agree that installation of reburn technology in Manatee Units 1 and 2, in conjunction with the achievement of an emissions rate of no greater than 0.25 pounds per million BTU on a 30-day rolling average, will reduce nitrogen oxides emissions from the facility in a potential ozone nonattainment area.
- 3. FPL shall commence installation of reburn technology in one of the existing Manatee Units (either Unit 1 or Unit 2) no later than 18 months after receiving all required state, federal or local environmental permits. FPL shall commence installation of reburn technology on the other unit no later than 12 months after installation has commenced on the first Unit. Installation of reburn technology in each Unit shall be completed no later than 12 months after commencement of installation in that Unit. The reburn technology will consist of a combustion

modification process that utilizes fuel (either oil or natural gas) and air staging within the boilers to reduce nitrogen oxides emissions. In addition, overfire air (OFA) may be injected above the reburn zone within the boilers of Manatee Units 1 and 2 to reduce overall nitrogen oxides emissions.

- 4. The reburn technology installed in Manatee Units 1 and 2 shall be designed to achieve a nitrogen oxides emissions goal of 0.20 pounds per million BTU heat input on a 30-day rolling average. It is anticipated that achievement of this emissions goal will be achieved by utilizing the reburn when operating the Unit at greater than or equal to 350 megawatts.
- 5. Upon completion of installation of the reburn technology in each Unit, FPL shall optimize the operation of that Unit with reburn technology. After this optimization period has been completed for a Unit, or after a six month period, whichever occurs first, the reburn technology shall be utilized to minimize nitrogen oxides emissions when that Unit is in operation.
- 6. After completion of the optimization period for each Unit described in Paragraph 5, a nitrogen oxides emissions limit of 0.25 pounds per million BTU (30-day rolling average) shall apply to that Unit. This nitrogen oxides emissions limit shall apply during the data collection, testing and evaluation program described in Paragraph 7 and shall be incorporated into the Manatee Plant's Title V permit at the time of the next renewal.
- This program shall include collection and analysis of data on nitrogen oxides emissions, boiler operating parameters, Unit performance characteristics and emissions of other pollutants, as well as projections of emissions rates assuming alternative, non-tested operating parameters and burner performance and load-changing conditions, boiler and burner performance and any other factors relevant in evaluating possible changes to the nitrogen

oxides emissions limit for Manatee Units 1 and 2. At the end of the 18 month period, FPL shall submit a report to FDEP summarizing the results of the program and addressing whether any further change in the applicable nitrogen oxides emissions limit is possible under tested and other alternative operating scenarios. Following receipt of the report, FDEP and FPL shall meet to discuss whether any further change in the applicable nitrogen oxides emissions limit for Manatee Units 1 and 2 is possible. If FDEP and FPL mutually agree on a change in the nitrogen oxides emissions limit for Manatee Units 1 and 2, FPL shall submit a Title V application for the Manatee Plant's Title V permit to incorporate the new, agreed-upon limit. If FDEP and FPL do not agree on any new nitrogen oxides emissions limit for Manatee Units 1 and 2, the limit established in Paragraph 6 shall remain applicable.

- 8. In the event state or federal law changes to require a change in nitrogen oxides emissions or the Tampa Bay Airshed is declared non-attainment for ozone, any reduction requirements would be in accordance with all applicable state and federal requirements. FDEP concurs that the changes contemplated by this Agreement will not constitute "modifications" that trigger New Source Review. In addition, although Florida currently has no state statute providing for nitrogen oxides trading or credits, FPL shall be entitled to retain all nitrogen oxides reduction credits and trading rights that may be authorized by Florida law in the future.
- 9. FDEP concurs that the steps and changes described in paragraphs 3 through 7, above, are prudent for purposes of (a) ensuring that FPL's Manatee Plant located within the Tampa Bay Airshed supports the area's compliance with the 8-hour ozone ambient air quality standard and (b) authorizing related cost recovery pursuant to Section 366.8255(1)(d), Florida Statutes, as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.
- 10. FDEP shall process in a timely manner any permit applications or requests for approvals necessary to implement this Agreement.

11. This Agreement is not and shall not be construed to be a permit issued or required pursuant to any federal, state or local law, rule or regulation including those of FDEP and Manatee County.

12. FPL shall be entitled to relief from the time requirements of this Agreement in the event of a *force majeur*, which includes, but is not limited to, delays in regulatory approvals, construction, labor, material, or equipment delays, fuel supply delays, acts of God or other similar events that are beyond the control of FPL and do not result from its own actions, for the length of time necessarily imposed by any such delay.

13. There shall be no modifications or amendments of this Agreement without the written agreement of all parties to this Agreement.

14. This Agreement shall apply to and be binding upon FDEP and FPL and their successors and assigns. Each person signing this Agreement certifies that he or she is authorized to execute this Agreement and to legally bind the party on whose behalf he or she signs this Agreement.

By their signatures affixed below, the parties agree to be bound by the terms and conditions of this Agreement.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

9-19-02 Date

BY: Allan Bedwell, Deputy Secretary

FLORIDA POWER & LIGHT COMPANY

9-19-02

BY:

Randall LaBauve, Vice President

Environmental Services

Date