

Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

October 20, 2004

Mr. Richard Merrill
Plant Manager and Responsible Official
Florida Power & Light Company
Environmental Services Department
700 Universe Boulevard
Juno Beach, Florida 33408

Re: PROPOSED Title V Permit Revision No. **0110037-004-AV**
Facility ID: **0110037**; ORIS Code: **0613**
Lauderdale Plant

Dear Mr. Merrill:

One copy of the "PROPOSED PERMIT REVISION DETERMINATION" for the Lauderdale Plant, located 2 miles West of Ravenswood Road, Fort Lauderdale, Broward County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit revision has become a PROPOSED permit revision.

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 (U.S. EPA) Region 4 office's review. The web site address is:

<http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp>

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit revision is made by the U.S.EPA within 45 days, the PROPOSED permit revision will become a FINAL permit revision no later than 55 days after the date on which the PROPOSED permit revision was mailed (posted) to U.S.EPA. If U.S.EPA has an objection to the PROPOSED permit revision, the FINAL permit revision will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn. If you have any questions, please contact Tom Cascio at 850/921-9526.

Sincerely,

Trina L. Vielhauer, Chief
Bureau of Air Regulation

Enclosures
Copy furnished to:

Kevin Washington, Florida Power & Light Company
Thomas Tittle, Southeast District Office
Daniela Banu, Broward County Department of Planning and Environmental Protection
U.S.EPA, Region 4 (INTERNET E-mail Memorandum)

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PROPOSED Permit Revision Determination
Florida Power & Light Company
Lauderdale Plant
Title V Permit Revision No. 0110037-004-AV

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" to the Florida Power & Light Company for the Lauderdale Plant, located 2 miles West of Ravenswood Road, Fort Lauderdale, Broward County, was clerked on August 27, 2004. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was published in the Sun-Sentinel on September 11, 2004. The DRAFT Title V Air Operation Permit Revision was available for public inspection at the Broward County Department of Planning and Environmental Protection office in Fort Lauderdale, and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was received on September 20, 2004.

II. Public Comments.

No comments were received from the applicant, the public at large, or the U.S.EPA concerning the DRAFT Title V Operation Permit Revision.

III. Conclusion.

The permitting authority hereby issues PROPOSED Permit Revision No. 0110037-004-AV, with no changes.

STATEMENT OF BASIS

Title V Permit Revision No. 0110037-004-AV

Florida Power and Light Company

Lauderdale Plant

Broward County

This Title V air operation permit revision 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 drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists primarily of two combined-cycle generating units (with four combustion turbines), two banks of twelve simple-cycle gas turbine units, and seven fuel storage tanks. Each combined-cycle unit has a net capability of 430 MW. Each bank of simple-cycle gas turbines has a net capability of 504 MW.

The four combined-cycle combustion turbines (CTs) are identical in configuration. Each CT is connected to an electrical generator, and each CT generates heat which produces steam in a heat recovery steam generator (HRSG). The steam from two HRSGs is then sent to a steam turbine generator for additional electrical power. The **combined** CT 4A and CT 4B units are designated Unit 4; in like manner, the **combined** CT 5A and CT 5B units are designated Unit 5. NOx emissions are controlled by using steam injection. Duct modules, suitable for later installation of selective catalytic reduction equipment, have been installed. Unit 4 commenced commercial operation in May, 1993; Unit 5 commenced commercial operation in June, 1993.

The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C; PSD-FL-145, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; and Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C. The facility holds ORIS code **0613** under the federal Acid Rain Program.

The bank of CTs Nos. 1 to 12 commenced commercial operation in August, 1970; the bank of CTs Nos. 13 to 24 commenced commercial operation in August, 1972. These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are **not** subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.

Also included in this permit is a regulated unit for solvent usage; in addition, there are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V permit renewal application received on June 13, 2003, this facility is a major source of hazardous air pollutants (HAPs).

This permit revision includes the following changes:

- Specific Condition **A.14.1.** was added. This specific condition was inadvertently omitted from the initial and renewal Title V permits issued previously.

A.14.1. Nitrogen Oxides. The nitrogen oxides emissions are limited to 65 parts per million when burning fuel oil and 42 parts per million when burning natural gas. See Specific Condition **A.7.** [PSD-FL-145, Specific Condition 9.]

- Specific Condition **A.31.** was changed as noted below.

A.31. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

a. *Nitrogen oxides.* Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. *Any one-hour period in which less water is applied than the system-calculated water demand is deemed to be an hour in which the average water-to-fuel ratio falls below the water-to-fuel ratio determined to demonstrate compliance.* Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

[40 CFR 60.334(c)(1)]

- The following permitting note was added after Specific Condition **A.31.**

{Permitting note: In practice, the combustion turbine NOx control systems calculate the amount of steam required at a given load, not the water-to-fuel ratio required at a given load. The curve of steam demand versus combustion turbine load was developed as part of the initial performance testing protocol. The initial performance testing demonstrated compliance with the emission limitations specified in Specific Condition **A.7.**}

- Specific Condition **A.31.1.** and the following permitting note were added.

A.31.1. CEMS in lieu of Water-to-Fuel Ratio (optional). The NOx CEMS may be used in lieu of the water-to-fuel ratio monitoring system for purposes of reporting excess emissions in accordance with 40 CFR 60.334(c)(1). See Specific Condition **A.31.** The permittee shall notify and receive approval from the compliance authority prior to beginning or ending the use of this option. Under this option, for purposes of excess emissions reporting only, any one-hour period during which the CEMS indicates that NOx emissions in excess of the permitted NOx standards shall be deemed to be periods when the water-to-fuel was below that determined to be in compliance with the permitted NOx standard.

[Applicant request.]

{Permitting note: One-hour periods during which the CEMS indicates NOx emissions in excess of the permitted NOx standards shall not be deemed violations of the permitted NOx standards. The permitted NOx standards are based on a three-hour average that corresponds to the length of the NOx stack method.}

Florida Power and Light Company
Lauderdale Plant
Facility ID No. **0110037**
Broward County

Title V Air Operation Permit Revision
PROPOSED Permit No. **0110037-004-AV**

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

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

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

Compliance Authority:

Broward County Department of Planning and Environmental Protection
Air Quality Division

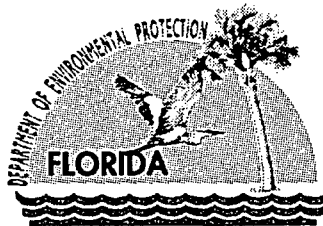
218 Southwest First Avenue
Fort Lauderdale, Florida 33301

Telephone: 954/519-1220
Fax: 954/519-1495

Title V Air Operation Permit Revision
PROPOSED Permit No. 0110037-004-AV

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Department of Environmental Protection

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

Colleen M. Castille
Secretary

Permittee:

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408

PROPOSED Permit No. 0110037-004-AV

Facility ID No. 0110037

SIC Nos.: 49, 4911

Project: Title V Air Operation Permit Revision

This permit revision is for the operation of the Lauderdale Plant. This facility is located 2 miles West of Ravenswood Road, Fort Lauderdale, Broward County; UTM Coordinates: Zone 17, 580.2 km East and 2883.3 km North; Latitude: 26° 04' 05" North and Longitude: 80° 11' 54" West.

This Title V air operation permit revision 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 drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

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-4, Title V Conditions (version dated 2/12/02).

Appendix SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96).

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS.

EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July, 1996).

Phase II Acid Rain Part Renewal Application, signed by the Designated Representative on April 7, 2003.

Customized Fuel Monitoring Schedule (dated March 12, 1993).

Effective Date: January 1, 2004

Revision Effective Date:

Renewal Application Due Date: July 5, 2008

Expiration Date: December 31, 2008

Michael G. Cooke, Director
Division of Air Resource Management

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Section I. Facility Information.

Subsection A. Facility Description.

This facility consists primarily of two combined-cycle generating units (Unit 4 and Unit 5), two banks of twelve simple-cycle gas turbine units, and eight fuel storage tanks. Each combined-cycle unit consists of two combustion turbines (CTs) which each exhaust through a separate heat recovery steam generator (HRSG). Each HRSG converts the heat from the CT exhaust into steam. The steam produced from two HRSGs drives one single-reheat turbine generator. Each combined-cycle unit has a net summer continuous capability of 430 MW. Each bank of simple-cycle gas turbines has a net capability of 504 MW.

Also included in this permit is a regulated unit for solvent usage; in addition, there are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V permit renewal application received on June 13, 2003, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
-035	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-036	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-037	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5A)
-038	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5B)
-003	Bank of 12 Combustion Turbines (Nos. 1 to 12)
-015	Bank of 12 Combustion Turbines (Nos. 13 to 24)
-027	Fuel Oil Storage Tank #2 (80,000 bbl, Light Distillate Fuel Oil)
-028	Fuel Oil Storage Tank #3 (150,000 bbl, Light Distillate Fuel Oil)
-029	Fuel Oil Storage Tank #5 (75,000 bbl, Light Distillate Fuel Oil)
-030	2 Fuel Oil Dump Tanks (2,500 gallon and 110 gallon)
-032	Unleaded Fuel Storage Tank (4,000 gallon, Gasoline)
-033	Diesel Fuel Storage Tank (1,000 gallon)
-039	Site Solvent Usage

Unregulated Emissions Units and/or Activities	
-xxx	Facility-wide Fugitive Emissions for VOC's (041)
-xxx	Auxiliary Boiler used to provide steam to the turbine shaft seals during a cold start of the plant. Maximum heat input rate is 15.5 mmBtu/hr. It is fired with propane and limited to an annual fuel usage of one million gallons pursuant to Rule 62-210.300(3)(a)2., F.A.C. (categorical exemption).
-xxx	Propane Fuel Storage Tank

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). 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:

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

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

Statement of Basis

These documents are on file with the permitting authority:

Title V Permit Revision Application received on June 23, 2004.

FINAL Title V Permit Renewal with effective date of January 1, 2004.

DRAFT Title V Permit Revision clerked on August 27, 2004.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-4, Title V Conditions, is a part of this permit.
{Permitting note: Appendix TV-4, 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.** No person shall 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.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. **Prevention of Accidental Releases (Section 112(r) of CAA).**
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

and,

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]

5. **Unregulated Emissions Units and/or Activities.** 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. **Insignificant Emissions Units and/or Activities.** Appendix I-1, List of Insignificant Emissions 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. Volatile Organic Compounds (VOCs). The total VOC emissions from all emissions units at this facility (with the exception of the two combined-cycle units, Unit 4 and Unit 5, that are excluded from this specific condition) shall not exceed 99.92 tons per year. See Specific Conditions **B.7.**, **B.8.**, **C.1.**, **C.2.**, **D.1.**, and **D.2.**

[AC06-179848; and AO06-230614, Specific Condition 12.]

8. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

[Rule 62-296.320(1)(a), F.A.C.; and 0110037-002-AV, Specific Condition 8.]

9. **Not federally enforceable.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility shall include the following operational measures:

a. In order to perform sandblasting on fixed plant equipment in the small sandblast facility, temporary sandblasting enclosures shall be constructed as necessary. Containment devices shall be used to capture and contain sand.

b. Maintenance of paved areas shall be performed as needed.

c. Mowing of grass and care of vegetation shall be performed on a regular basis.

d. Access to plant property by unnecessary vehicles shall be controlled and limited.

e. Bagged chemical products shall be stored in weather-tight buildings until they are used. Spills of powdered chemical products shall be cleaned up as soon as practical.

[Rule 62-296.320(4)(c)2., F.A.C.; and proposed by applicant in the Title V permit renewal application received June 13, 2003.]

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to:

Broward County Department of Planning and Environmental Protection

Air Quality Division

218 Southwest First Avenue

Fort Lauderdale, Florida 33301

Telephone: 954/519-1220

Fax: 954/519-1495

12. 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
Air & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303
Phone: 404/562-9155
Fax: 404/562-9163 or 404/562-9164

13. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of Appendix TV-4, Title V Conditions).}

14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

Section III. Emissions Unit(s) and Conditions.**Subsection A. This section addresses the following emissions unit(s).**

E.U. ID No.	Brief Description
-035	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-036	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-037	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5A)
-038	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5B)

The four combined-cycle combustion turbines (CTs) are identical in configuration. Each CT is connected to an electrical generator, and each CT generates heat which produces steam in a heat recovery steam generator (HRSG). The steam from two HRSGs is then sent to a steam turbine generator for additional electrical power. The **combined** CT 4A and CT 4B units are designated Unit 4; in like manner, the **combined** CT 5A and CT 5B units are designated Unit 5. Unit 4 and Unit 5 each have a net summer continuous capability of 430 MW. NOx emissions are controlled by using steam injection. Duct modules, suitable for later installation of selective catalytic reduction equipment, have been installed. Unit 4 commenced commercial operation in May, 1993; Unit 5 commenced commercial operation in June, 1993.

{Permitting notes: the emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C; PSD-FL-145, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; and Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:**General**

A.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

[40 CFR 60.2; and Rule 62-204.800(7)(a), F.A.C.]

A.2. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12.]

Essential Potential to Emit (PTE) Parameters

A.3. Permitted Capacity. The maximum heat input (lower heating value) to each combustion turbine shall not exceed 1,775.62 MMBtu/hr while firing natural gas nor 1,646.9 MMBtu/hr while firing fuel oil, at 75 degrees F.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and PSD-FL-145, Specific Condition 1.]

{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.}

A.4. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **A.20.**

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

A.5. Methods of Operation - (Fuels).

Only natural gas or light distillate fuel oil shall be fired in the CTs.

[Rule 62-213.410, F.A.C.; and PSD-FL-145.]

A.6. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year, provided that the annual heat input (lower heating value) to the four CTs does not exceed 54,129,421 MMBtu and the annual heat input attributed to light distillate fuel oil firing does not exceed 14,426,844 MMBtu (@ 75 degrees F).

[Rule 62-210.200(PTE), F.A.C.; and PSD-FL-145, Specific Condition 2.]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **A.7.** and **A.9.** are based on the specified averaging time of the applicable test method.}

A.7. The maximum allowable emissions from each CT, in accordance with the BACT determination, shall not exceed the following emissions, at 75 degrees F:

Pollutant	Fuel	Basis	Emission Limitations	
			lb/hr/CT	4 CTs (TPY)*
NO _x	Gas	42 ppmvd**	264	4868 (combined gas and oil total)
	Oil	65 ppmvd**	422	
VOC	Gas	1 ppmvd	1.3	50 (combined gas and oil total)
	Oil	6 ppmvd	7.8	
CO	Gas	30 ppmvd	89	1,489 (combined gas and oil total)
	Oil	33 ppmvd	100	
PM/PM ₁₀	Gas		14.7	424.7 (combined gas and oil total)
	Oil		58	
SO ₂	Gas		4.9	1,582.8 (combined gas and oil total)
	Oil		538	

Notes:

* Refers to the maximum facility emissions (four CTs), with capacity limitations of 25 percent on oil.

**ppm NO_x, dry, corrected to ISO standard ambient air conditions and 15 percent oxygen.

[PSD-FL-145, Specific Condition 5.]

A.8. The following potential emissions, determined by BACT, are tabulated for PSD and inventory purposes:

Pollutant	Fuel	Maximum Potential Emissions (@40 ° F)	
		lb/hr/CT	4 CTs (TPY)
H ₂ SO ₄ Acid Mist	Gas	0.042	196 (combined gas and oil total)
	Oil	67	
Mercury	Gas	0.0192	0.3 (combined gas and oil total)
	Oil	0.0049	
Fluoride	Oil	0.0535	0.23
Beryllium	Oil	0.0041	0.02

Sulfuric acid mist emissions assume a maximum of 0.3 percent sulfur in fuel oil for hourly emissions, and an average sulfur content of 0.2 percent for annual emissions.
[PSD-145, Specific Condition 6.]

A.9. Visible Emissions. Visible emissions shall neither exceed 10% opacity while burning natural gas, nor exceed 20% opacity while burning distillate oil.
[PSD-FL-145, Specific Condition 7.]

A.10. Opacity. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
[40 CFR 60.11(a)]

A.11. Opacity. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
[40 CFR 60.11(c)]

A.12. Sulfur Dioxide. The maximum allowable sulfur (total) content of the natural gas burned at this facility shall not exceed 10 grains per 1,000 cubic feet (gr/1000 CF). The permittee shall monitor the sulfur content of the natural gas by the customized fuel monitoring schedule approved by EPA.
[PSD-FL-145, Specific Condition No. 5; and Customized Fuel Monitoring Schedule, dated March 12, 1993.]

A.13. Sulfur Dioxide. The sulfur content of the light distillate fuel oil shall not exceed a maximum of 0.3 percent, by weight, and shall not exceed an average of 0.2 percent, by weight, during any consecutive 12-month period. The 12-month average sulfur content shall be calculated as a weighted average based upon the sulfur content of the oil and the amount burned on a daily basis. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.335 by testing all oil shipments for sulfur content, nitrogen content, and heating value, using ASTM D 2800-96 or the latest edition.
[Rule 62-213.440, F.A.C.; applicant agreement with EPA on March 3, 1998; and PSD-FL-145, Specific Conditions 5. and 11.]

A.14. Nitrogen Oxides. The nitrogen oxides emissions from each combustion turbine unit shall be controlled by using steam injection for both natural gas and fuel oil firing modes.
[PSD-FL-145, Specific Condition 8.]

A.14.1. Nitrogen Oxides. The nitrogen oxides emissions are limited to 65 parts per million when burning fuel oil and 42 parts per million when burning natural gas. See Specific Condition A.7.
[PSD-FL-145, Specific Condition 9.]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

A.15. 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.16. 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.17. 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.]

A.18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

Test Methods and Procedures

{Permitting note: 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.19. Except as specified in this condition for visible emissions testing on fuel oil, annual compliance tests shall be performed on each combustion turbine unit with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A. The stack test for each turbine shall be performed according to the requirements of Specific Condition **A.20**.

Pollutant	EPA Reference Method	Gas	Oil
Particulate Matter	5 or 17		X
Visible Emissions	9	X	X
Carbon Monoxide	10	X	X
Nitrogen Oxides	20	X	X
	Test Method		
Sulfur content	ASTM D 2880-96*		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92*	X	

*or the latest edition.

The owner or operator shall conduct testing for visible emissions while firing fuel oil, using EPA Method 9, for each combustion turbine unit upon that turbine's exceeding 400 hours of operation on fuel oil, and every 150 hours of operation on fuel oil thereafter, in any given federal fiscal year (October 1 through September 30). Such tests shall be performed within 15 days of exceeding such operating hours, to allow for prior notification of the tests.

[Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, PSD-FL-145, Specific Condition 10.; and Administrative Permit Correction dated November 7, 2000.]

A.20. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at capacity. Capacity is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then an emissions unit may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. 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.; and PSD-FL-145, Specific Condition 23.]

Monitoring of Operations

A.21. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A.22. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.
[40 CFR 60.334(a)]

A.23. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- (2) If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b). The Lauderdale Plant has an approved Customized Fuel Monitoring Schedule (dated March 12, 1993).

[40 CFR 60.334(b)(1) and (2)]

Continuous Monitoring Requirements

A.24. Continuous monitoring of the steam injection rates shall be operated and maintained in accordance with 40 CFR 60, Subpart GG, for each unit.

[PSD-FL-145, Specific Condition 12.]

A.25. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, the continuous emission monitoring system shall be installed, calibrated, operated and maintained in accordance with the quality assurance requirements of 40 CFR 75, adopted and incorporated by reference in rule 62-204.800, F.A.C. Compliance shall be demonstrated based on a 3-hour rolling average.

[40 CFR 60.13(a); and Rules 62-213.440, 62-204.800, and 62-296.405(1)(c)3., F.A.C.]

A.26. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

[40 CFR 60.13(d)(1)]

A.27. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

A.28. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

A.29. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

[40 CFR 60.13(g)]

Recordkeeping and Reporting Requirements

A.30. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.

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

A.31. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

a. *Nitrogen oxides.* Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. *Any one-hour period in which less water is applied than the system-calculated water demand is deemed to be an hour in which the average water-to-fuel ratio falls below the water-to-fuel ratio determined to demonstrate compliance.* Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

[40 CFR 60.334(c)(1)]

{Permitting note: In practice, the combustion turbine NO_x control systems calculate the amount of steam required at a given load, not the water-to-fuel ratio required at a given load. The curve of steam demand versus combustion turbine load was developed as part of the initial performance testing protocol. The initial performance testing demonstrated compliance with the emission limitations specified in Specific Condition A.7.}

A.31.1. CEMS in lieu of Water-to-Fuel Ratio (optional). The NO_x CEMS may be used in lieu of the water-to-fuel ratio monitoring system for purposes of reporting excess emissions in accordance with 40 CFR 60.334(c)(1). See Specific Condition **A.31**. The permittee shall notify and receive approval from the compliance authority prior to beginning or ending the use of this option. Under this option, for purposes of excess emissions reporting only, any one-hour period during which the CEMS indicates that NO_x emissions in excess of the permitted NO_x standards shall be deemed to be periods when the water-to-fuel was below that determined to be in compliance with the permitted NO_x standard.

[Applicant request.]

{Permitting note: One-hour periods during which the CEMS indicates NO_x emissions in excess of the permitted NO_x standards shall not be deemed violations of the permitted NO_x standards. The permitted NO_x standards are based on a three-hour average that corresponds to the length of the NO_x stack method.}

A.32. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

A.33. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

A.34. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), and (4)]

A.35. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) and (2)]

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)

A.36. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after

receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

A.37. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

A.38. To determine compliance with the oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption for each turbine and monthly records of heating value for such fuel. All records shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Department upon request.

[PSD-FL-145, Specific Condition 13.]

A.39. Quarterly excess emission reports, in accordance with the July 1, 1996 version of 40 CFR 60.7 and 60.334, shall be submitted to the Broward County Department of Planning and Environmental Protection office.

[PSD-FL-145, Specific Condition 19.]

A.40. The emissions units are also subject to the conditions contained in **Subsection E., Common Conditions.**

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

E.U. ID No.	Brief Description
-003	Bank of 12 Combustion Turbines (Nos. 1 to 12)
-015	Bank of 12 Combustion Turbines (Nos. 13 to 24)

The emissions units are two banks of twelve simple-cycle gas turbine units. Each bank of CTs has a net capability of 504 MW.

The bank of CTs Nos. 1 to 12 commenced commercial operation in August, 1970; the bank of CTs Nos. 13 to 24 commenced commercial operation in August, 1972.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are **not** subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The heat input rate (lower heating value) to each combustion turbine shall not exceed 702 MMBtu per hour.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and AO06-230614]

B.2. Permitted Capacity. The total fuel firing rate (lower heating value) for each bank of 12 gas turbines shall not exceed 8,424 MMBtu/hr during fuel oil firing or natural gas firing. Annual heat input (lower heating value) for each bank of 12 gas turbines shall not exceed $7,379 \times 10^9$ Btu.
[AO06-148762]

{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.}

B.3. Methods of Operation - Fuels. The only fuels authorized to be burned in these emissions units are natural gas or light distillate fuel oil.
[Rule 62-213.410, F.A.C.; AO06-230614]

B.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition 8]

B.5. Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.19**.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **B.6.** through **B.9.** are based on the specified averaging time of the applicable test method.}

B.6. Visible Emissions. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and AO06-230614, Specific Condition 6.]

B.7. Volatile Organic Compounds (VOCs). VOC emissions from each gas turbine shall not exceed 0.0013 lb/MMBtu when burning No. 2 fuel oil, and 0.0034 lb/MMBtu when burning natural gas. When both fuels are burned at the same time, the allowable emissions shall be prorated.

[AO06-230614, Specific Condition 4.]

B.8. Volatile Organic Compounds (VOCs). Total VOC emissions from the 24 gas turbines when operating at the permitted capacity shall not exceed 57.3 lbs/hr when the units are burning natural gas, and 21.1 lbs/hr when the units are burning oil. When both fuels are burned at the same time, the allowable emissions shall be prorated.

[AO06-230614, Specific Condition 5.]

B.9. Nitrogen Oxides. Nitrogen oxides emissions from each gas turbine shall not exceed 0.90 lb/MMBtu and 631 lbs/hr when burning No. 2 fuel oil, and 0.50 lb/MMBtu and 351 lbs/hr when burning natural gas.

[Rule 62-296.570(4)(b)5., F.A.C.; and AO06-230614]

Excess Emissions;

B.10. 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.]

B.11. 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.]

B.12. 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

B.13. Determination of Process Variables.

(a) Required Equipment. 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.

(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.

[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

B.14. Visible Emissions Testing Required. The owner or operator shall conduct testing for visible emissions, using EPA Method 9, while the combustion turbine is operating at 90-100 percent of its capacity, according to the following schedule.

The owner or operator shall conduct testing for visible emissions while firing fuel oil for each simple-cycle turbine unit upon that turbine's exceeding 400 hours of operation on fuel oil, and every 150 hours of operation on fuel oil thereafter, in any given federal fiscal year (October 1 through September 30). Such tests shall be performed within 15 days of exceeding such operating hours, to allow for prior notification of the tests.

Regardless of the number of hours of operation on fuel oil, at least one compliance test shall be conducted on all twenty-four combustion turbines every five years, coinciding with the term of the operation permit for these turbines. At least one quarter of such tests shall be conducted while burning fuel oil, and at least one quarter of such tests shall be conducted while burning natural gas.

[Rule 62-213.440, F.A.C.; applicant agreement with EPA on March 3, 1998; and AC06-179848, Specific Condition 23.]

B.15. The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; and AC06-179848]

B.16. Nitrogen Oxides. Provided operation is no more than 320 hours/year/turbine on oil, NOx emissions for the combustion turbines shall be tested every five (5) years by EPA Method 20 or Method 7E tests as described in 40 CFR 60, Appendix A (July 1, 1996) on any representative unit in each bank of the combustion turbines. Tests shall be conducted both while burning 100% natural gas and 100% light distillate oil.

[Rule 62-296.570, F.A.C.; and requested by the applicant in letters dated October 1, 1997, and August 27, 2003.]

B.17. The test method for nitrogen oxides shall be EPA Method 20 or Method 7E, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800 & 62-297.401, F.A.C.; and AO06-230614.]

B.18. The VOC emission factors for the combustion turbines shall be confirmed every five (5) years by EPA Method 25A and/or Method 18 tests as described in 40 CFR 60, Appendix A (July 1, 1996) on any representative unit in each bank of the combustion turbines. Tests shall be conducted both while burning 100% natural gas and 100% No. 2 fuel oil.

[AO06-230614, Specific Condition 9.; and Administrative Permit Correction dated November 7, 2000.]

B.19. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating 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 (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. 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.

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

B.20. Applicable Test Procedures.

(a) Required Sampling Time.

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.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

B.21. 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.

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: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

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) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to 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) Waiver of Compliance Test Requirements. 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.; and SIP approved.]

- B.22. Visible Emissions Testing - Annual.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuels; or
 - b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
 - c. only liquid fuels for less than 400 hours per year.
- [Rules 62-297.310(7)(a)4. and 8., F.A.C.]

Recordkeeping and Reporting Requirements

- B.23. Malfunction Reporting.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.
- [Rule 62-210.700(6), F.A.C.]

B.24. 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 on the results of each such test.
 - (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- [Rule 62-297.310(8), F.A.C.]

- B.25.** The permittee shall keep records of the type and quantity of fuel, gallons per hour of oil and million cubic feet per hour of natural gas used by each bank of combustion turbines for at least five (5) years. Usage shall be determined on the basis of time of operation versus total fuel consumption for each bank.
- [AC06-179848, Specific Condition 21.]

- B.26.** A written quarterly report shall be submitted to the Department of all opacity exceedances of emissions limitations specified in Rules 62-210.700 and 62-296.310, F.A.C. The report shall state the cause, period of noncompliance, and steps taken for corrective action and/or prevention of recurrence. If the opacity level cannot be determined for any reason, the report shall state the cause, duration, and action taken. All recorded data shall be maintained on file for not less than five (5) years and made available to the Department upon request.
- [AO06-230614, Specific Condition 17.]

- B.27.** The emissions units are also subject to the conditions contained in **Subsection E., Common Conditions.**

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

E.U. ID No.	Brief Description
-027	Fuel Oil Storage Tank #2 (80,000 bbl, Light Distillate Fuel Oil)
-028	Fuel Oil Storage Tank #3 (150,000 bbl, Light Distillate Oil)
-029	Fuel Oil Storage Tank #5 (75,000 bbl, Light Distillate Oil)
-030	2 Fuel Oil Dump Tanks (2,500 gallon and 110 gallon)
-032	Unleaded Fuel Storage Tank (4,000 gallon, Gasoline)
-033	Diesel Fuel Storage Tank (1,000 gallon)

Emission Limitations and Standards

{Permitting note: 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.}

C.1. The maximum volatile organic compounds (VOC) emissions and volume of organic liquids handled by the tanks shall not exceed the following:

E.U. ID No.	Organic Liquid	Annual Throughput Limit (Gallons)	VOC Emissions Limit (Tons/Year)
-027	Jet A fuel/No. 2 distillate fuel oil*	54,260,842	2.33
-028	Jet A fuel	106,079,730	4.46
-029	Jet A fuel/No. 2 distillate fuel oil	54,260,842	2.29
-030	No. 2 fuel oil	300,000	0.003
-032	Gasoline	10,000	0.106
-033	Diesel fuel	5,000	0.001

* If tank E.U. No. -027 is used to supply Jet A fuel to the two banks of combustion turbines, the total Jet A fuel handled by both tanks E.U. -027 and E.U. -028 shall not exceed 106,079,730 gallons per year, and the sum of the VOC emissions from both tanks E.U. -027 and E.U. -028 shall not exceed 6.79 tons per year.

[Rule 62-296.320(1)(a), F.A.C.; AC06-179848; and AO06-230614, Specific Condition 1.]

Recordkeeping and Reporting Requirements

C.2. The VOC emissions in tons per year, by specific tank, for all the units identified in specific condition **C.1.**, shall be calculated for Annual Operating Report for Air Pollutant Emitting Facility purposes by the procedures described in AP-42, Section 4.3, Storage of Organic Liquids. Actual throughput and representative meteorological data shall be used for these calculations. Also see Specific Condition 7. in the Facility-wide Conditions Section.
[Rule 62-210.370(3), F.A.C.; and AO06-230614, Specific Condition 3.]

C.3. The permittee shall keep records of the following for at least five (5) years:

a. The amount of light distillate fuel oil obtained for the facility.

b. The amount of No. 2 fuel oil obtained for the facility.

c. The throughput, by specific tank, for all the units identified in Specific Condition **C.1.**
[AO06-230614, Specific Condition 2.]

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-039	Site Solvent Usage

The following conditions apply to the emissions unit(s) listed above:

Emission Limitations and Standards

{Permitting note: 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.}

D.1. Volatile Organic Compounds (VOCs). Not more than 250 gallons/year, or 0.893 tons/year, VOC loss of solvent during any 12-month period shall be allowed for maintenance of this facility. Also see Specific Condition 7. in the Facility-wide Conditions Section. [AC06-179848, Specific Condition 24.]

Monitoring of Operations

D.2. The use of solvents for maintenance purposes shall be tracked and controlled during the calendar year. The VOC emissions from solvents shall be calculated by the following method: The solvent volume loss shall be equal to the total solvent purchased/in stock minus the solvent volume reclaimed/disposed of offsite. The solvent volume loss shall then be multiplied by the emission factor (mass VOC/unit of the solvent) to derive at a tons per year value. The total solvent tons per year emission value shall be added to all other VOC sources at the facility to ensure compliance with Specific Condition 7. in Section II., Facility-wide Conditions, of this permit. Specific Condition 7. limits facility-wide VOC emissions to 99.92 tons per year. Note that the combined-cycle units, Unit 4 and Unit 5, are excluded from Specific Condition 7. [AO06-230614, Specific Condition 10.]

Recordkeeping and Reporting Requirements

D.3. The permittee shall keep records of the type and quantity of solvents, in gallons per year, used during maintenance throughout this facility for a minimum of five (5) years. [AO06-230614, Specific Condition 11.]

Subsection E. Common Conditions.

E.U. ID No.	Brief Description
-035	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-036	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-037	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5A)
-038	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5B)
-003	Bank of 12 Combustion Turbines (Nos. 1 to 12)
-015	Bank of 12 Combustion Turbines (Nos. 13 to 24)

The following conditions apply to the emissions units listed above:

Test Methods and Procedures

E.1. 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.]

E.2. 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:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the

period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

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) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1
 CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter	2%
		Comparison check	5%

(e) Allowed Modification to EPA Method 5. 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.]

E.3. 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.]

Section IV. This section is the Acid Rain Part.

Operated by: **Florida Power and Light Company**

ORIS code: **0613**

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

The emissions units listed below are regulated under Phase II of the federal Acid Rain Program.

E.U. ID No.	Description
-001	Combined-Cycle Combustion Turbine (CT 4A)
-002	Combined-Cycle Combustion Turbine (CT 4B)
-003	Combined-Cycle Combustion Turbine (CT 5A)
-004	Combined-Cycle Combustion Turbine (CT 5B)

1. The Acid Rain Part renewal application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

a. DEP Form No. 62-210.900(1)(a), signed by the Designated Representative on April 7, 2003.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2004	2005	2006	2007	2008
-001	4GT1	SO ₂ allowances, under Table 2 of 40 CFR Part 73	948*	948*	948*	948*	948*
-002	4GT2	SO ₂ allowances, under Table 2 of 40 CFR Part 73	948*	948*	948*	948*	948*
-003	5GT1	SO ₂ allowances, under Table 2 of 40 CFR Part 73	948*	948*	948*	948*	948*
-004	5GT2	SO ₂ allowances, under Table 2 of 40 CFR Part 73	948*	948*	948*	948*	948*

*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 of 40 CFR 73.

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 increases 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.]

4. Fast-Track Revisions of Acid Rain Parts. 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.]

5. Comments, notes, and justifications: None.

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, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 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 Rules 62-210.300(3)(a) and (b)1., 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 Rules 62-210.300(3)(a) and (b)1., 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	Fire Protection Equipment
2	Mobile Emergency Diesel Generator
3	Fuel Gas System Miscellaneous Vents
4	Fuel Oil System Miscellaneous Vents
5	Gas Metering Area Miscellaneous Vents
6	Water Plant Analysis Room Exhaust Hood
7	Water Treatment Vents
8	Hazardous Waste Building Roof Vents
9	Fire Pump House Vent
10	Machine Shop Fans
11	Plant Service Building Roof Exhaust Fans
12	Waste Water Treatment Basins and Vents
13	Waste Water Treatment Control Building Roof Vents
14	Combustion Turbine and Accessories Vents
15	Steam Turbine System Vents
16	Circulating and Open Cooling Water System Vents
17	Bulk Gas Supply Vents
18	HRSF Feedwater and Steam, System Vents

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

Unregulated Emissions Units and/or Activities. 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
-xxx	Facility-wide Fugitive Emissions for VOC's
-xxx	Auxiliary Boiler used to provide steam to the turbine shaft seals during a cold start of the plant. Maximum heat input rate is 15.5 mmBtu/hr. It is fired with propane and limited to an annual fuel usage of one million gallons pursuant to Rule 62-210.300(3)(a)2., F.A.C. (categorical exemption).
-xxx	Propane Fuel Storage Tank

Appendix H-1. Permit History/ID Number Changes

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Revised Date(s)
-035 -036 -037 -038	Combined-Cycle Combustion Turbines with HRSGs	PSD-FL-145 0110037-001-AC	03/14/91		07/19/93 04/09/96 07/10/96
-003 -015	Two Banks of 12 Combustion Turbines	AO06-230614 AO06-148760 AC06-179848	06/18/93 08/02/93 10/30/90	06/04/98 10/01/91	07/26/95 04/23/93, 03/23/95, 07/26/95
-027	Fuel Oil Storage Tank #2	AO06-230614	06/18/93	06/04/98	07/26/95
-028	Fuel Oil Storage Tank #3	AO06-230614	06/18/93	06/04/98	07/26/95
-029	Fuel Oil Storage Tank #5	AO06-230614	06/18/93	06/04/98	07/26/95
-030	2 Fuel Oil Dump Tanks	AO06-230614	06/18/93	06/04/98	07/26/95
-032	Unleaded Fuel Storage Tank	AO06-230614	06/18/93	06/04/98	07/26/95
-033	Diesel Fuel Storage Tank	AO06-230614	06/18/93	06/04/98	07/26/95
-039	Site Solvent Usage	AO06-230614	06/18/93	06/04/98	07/26/95
	-035, -036, -037, -038, -003, and -015	0110037-001-AC	07/16/96		
	All of the above.	0110037-002-AV (Initial Title V Permit), and Administrative Permit Correction 0110037-003-AV (Title V Permit Renewal)	01/01/99 11/07/00 01/01/04	12/31/03 12/31/08	

ID Number Changes (for tracking purposes):

From: Facility ID No.: 50BRO060037; To: Facility ID No.: 0110037

Table 1-1, Air Pollutant Standards and Terms

**Florida Power & Light Company
Lauderdale Plant**

**Permit No. 0110037-004-AV
Facility ID No. 0110037**

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

E.U. ID No(s).	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Basis	Allowable Emissions		Equivalent Emissions*		Regulatory Citations	See Permit Conditions	
						lb/hr/CT	4 CTs (TPY)	lbs./hour	TPY			
-035 -036 -037 -038	Combined-cycle Combustion Turbines with HRSGs	PM/PM10	Oil	8760		58	100			Rule 62-212.410, F.A.C.	A.7	
			Gas	8760		14.7						
		SO2	Oil	8760		0.5% sulfur	538	1,582.80			40 CFR 60.333	A.7
			Gas	8760			4.9					
		NOx	Oil	8760		65 ppmvd @ 15% O2	422	4868			40 CFR 60.332	A.7., A.14.1.
			Gas	8760		42 ppmvd @ 15% O2	264					
		VOC	Oil	8760		6 ppmvd	7.8	50			Rule 62-212.410, F.A.C.	A.7
			Gas	8760		1 ppmvd	1.3					
		CO	Oil	8760		33 ppmvd	100	1,489			Rule 62-212.410, F.A.C.	A.7
			Gas	8760		30 ppmvd	89					
		SAM	Oil	8760			0.042	196			Rule 62-212.410, F.A.C.	A.8
			Gas	8760								
		H114	Oil	8760			0.0192	0.3			Rule 62-212.410, F.A.C.	A.8
	Gas	8760			0.021							
FL	Oil	8760			0.0535	0.23			Rule 62-212.410, F.A.C.	A.8		
H021	Oil	8760			0.0041	0.02			Rule 62-212.410, F.A.C.	A.8		
Opacity	Oil	8760			Not > 20%				Rule 62-212.410, F.A.C.	A.9		
	Gas	8760			Not > 10%							
E.U. ID No(s).	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	Allowable Emissions		Equivalent Emissions*		Regulatory Citations	See Permit Conditions	
					lb/hr/CT	TPY	lbs./hour	TPY				
-003 -015	Banks of 12 Combustion Turbines	Opacity	Oil	8760	< 20%					Rule 62-296.320(4)(b)1., F.A.C.	B.6	
			Gas	8760	< 20%						B.6	
		NOx	Oil	8760	0.90 lb/MMBtu	631			6641.1	Rule 62-296.570(4)(b)5., F.A.C.	B.9	
			Gas	8760	0.50 lb/MMBtu	351					B.9	
	VOC	Oil	8760	0.0013 lb/MMBtu	21.1	99.92**			AO06-230614	B.7, B.8		
		Gas	8760	0.0034 lb/MMBtu	57.3					B.7, B.8		
-027	Fuel Oil Storage Tank	VOC	Oil				2.33			AO06-230614	C.1	
-028	Fuel Oil Storage Tank	VOC	Oil				4.46			AO06-230614	C.1	
-029	Fuel Oil Storage Tank	VOC	Oil				2.29			AO06-230614	C.1	
-032	Unleaded Fuel Tank	VOC					0.106			AO06-230614	C.1	
-033	Diesel Fuel Tank	VOC					0.001			AO06-230614	C.1	
-030	2 Fuel Oil Dump Tanks	VOC	Oil				0.003			AO06-230614	C.1	
-039	Site Solvent Usage	VOC					0.893			AO06-230614	D.1	


*The Equivalent Emissions listed are for informational purposes only.

**This is a facility wide limit, but excludes the two combined-cycle units.

Table 2-1, Compliance Requirements

Florida Power & Light Company Lauderdale Plant			Permit No. 0110037-004-AV Facility ID No. 0110037				
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.							
E.U. ID Nos.		Brief Description					
-035 -036 -037 -038		Combined-cycle Combustion Turbines with HRSGs					
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
VE	Oil	EPA Method 9	Annual	1-Oct	1 Hour		A.19
	Gas	EPA Method 9	Annual	1-Oct	1 Hour		A.19
PM/PM10	Oil	EPA Method 5 or 17	Annual	1-Oct	3 Hours		A.19
SO2 (Sulfur Content of Fuel)	Oil	ASTM D 2880-96	Upon receipt of distillate oil				A.19
	Gas	ASTM D 1072-90(94)E-1 or D 3031-81(86) or D 4084-94 or D 3246-92	Annual	1-Oct			A.19
NOx	Oil	EPA Method 20	Annual	1-Oct		Yes	A.19
	Gas	EPA Method 20	Annual	1-Oct		Yes	A.19
CO	Oil	EPA Method 10	Annual	1-Oct			A.19
	Gas	EPA Method 10	Annual	1-Oct			A.19
CO2						Yes	
E.U. ID Nos.		Brief Description					
-003 -015		Banks of 12 Combustion Turbines					
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
VE	Oil	EPA Method 9	Annual	1-Oct	1 Hour		B.15
	Gas	EPA Method 9	Annual	1-Oct	1 Hour		B.15
NOx	Oil	EPA Method 20 or 7E	Annual	1-Oct			B.16, B.17
	Gas	EPA Method 20 or 7E	Annual	1-Oct			B.16, B.17
VOC	Oil	EPA Method 25A and/or 18	5 years	1-Oct			B.18
	Gas	EPA Method 25A and/or 18	5 years	1-Oct			B.18
Notes:							
*CMS [=] Continuous Monitoring System							
**Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.							

MEMORANDUM

TO: Trina Vielhauer
THROUGH: Scott Sheplak ^{and}
FROM: Tom Cascio 
DATE: October 20, 2004
Re: PROPOSED Permit Revision No. **0110037-004-AV**
Florida Power & Light Company
Lauderdale Plant

No comments were received concerning the DRAFT permit during the public comment period. I recommend that the cover letter to the applicant be signed and the package forwarded to Barbara for posting on the Internet for EPA review.