



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
Turkey Point Fossil Plant
Facility ID No.: 0250003
Dade County

Title V Air Operation Permit Renewal
PROPOSED Permit No.: 0250003-005-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 October 10, 2003.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is November 23, 2003. 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 December 3, 2003.

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

David B. Struhs
Secretary

October 8, 2003

H. O. Nunez
Responsible Official
FPL Turkey Point Fossil Plant
9760 SW 344th Street
Florida City, FL 33055

Re: Initial Title V Air Operation Permit
PROPOSED Title V Permit No.: 0250003-005-AV
FPL Turkey Point Fossil Plant

Dear Mr. Nunez,

One copy of the PROPOSED PERMIT DETERMINATION for the Turkey Point Fossil Plant located at 9760 SW 344th Street, Florida City, Dade 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permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.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 have any questions, please contact Bobby Bull at 850/921-9585.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TV/rlb

Enclosures

Copy to: John C. Hampp, Florida Power and Light Company (E-mail)
Kennard F. Kosky, P.E., Golder Associates, Inc. (E-mail)
Patrick Wong, Dade County DERM, AWQD (E-mail)
U.S. EPA, Region 4 (Internet E-mail Memorandum)

Posted 10/10/03
Mailed 10/13/03
cc: Bobby Bull
Rebecca Sife
Trina Vielhauer

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PROPOSED Permit Determination
Turkey Point Fossil Plant
Permit No. 0250003-005-AV

I. Public Notice.

An INTENT TO ISSUE TITLE V AIR OPERATION PERMIT to Turkey Point Fossil Plant located at 9760 SW 344th Street, Florida City, Dade County was distributed on August 13, 2003. The PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT was published in the Herald Advertiser on August 27, 2003. The DRAFT Title V Air Operation Permit was available for public inspection at the Dade County Department of Environmental Resources Management, Air Quality Management Division in Miami and the Department of Environmental Protection's (Department) Bureau of Air Regulation office in Tallahassee. Proof of publication of the PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT was received on September 17, 2003.

II. Public Comment(s).

Comments were received from the applicant during the 30 (thirty) day public comment period. The Department will list each letter in the chronological order of receipt and will respond (R) to each comment in the order that the comment was stated in the letter. The comment(s) will not be restated. Where duplicate comments exist, the original response will be referenced.

A. Email comments from Mr. John C. Hampp of Florida Power and Light Company were sent and received on September 26, 2003, and the DRAFT Permit was changed.

1. Response:

As a result of these comments, **Specific Condition A.1.**, is hereby changed:

From: A.1. Permitted Capacity. For each emissions unit, the maximum heat input (mmBtu per Hour) shall not exceed 4,025 mmBtu per hour while firing natural gas, or 3,850 mmBtu per hour while firing fuel oil. If a blend of fuels is fired, the heat input shall be prorated based on the percent heat input of each fuel. Power ratings are nominal and are not limiting of either unit.

To: A.1. Permitted Capacity. For each emissions unit, the maximum heat input (mmBtu per Hour) shall not exceed 4,150 mmBtu per hour while firing natural gas, or 4,000 mmBtu per hour while firing fuel oil. If such a blend of fuels is fired, the heat input shall be prorated based on the percent heat input of each fuel. Power ratings are nominal and are not limiting of either unit.

2. Response:

As a result of these comments, **Specific Condition A.3.**, is hereby changed:

From: A.3. Methods of Operation – Fuels. The only fuels allowed to be burned are new No. 2 fuel oil, new No. 6 residual oil, natural gas, propane, and on-specification used oil generated exclusively from FPL operations.

The used oil shall comply with the requirements given in specific condition A.22. Additionally, no more than 750,000 gallons shall be burned annually.

Magnesium hydroxide fuel additives are authorized to be added to the boiler units as needed to enhance combustion and facilitate furnace cleaning in a manner consistent with Best Operational Practices.

To: A.3. Methods of Operations – Fuels. The only fuels allowed to be burned are No. 2 fuel oil, No. 6 residual fuel oil, natural gas, propane, and on-specification used oil generated from FPL operations.

The used oil shall comply with the requirements given in specific condition A.22. Additionally, no more than 750,000 gallons shall be burned annually.

FPL may inject additives such as magnesium oxide, magnesium hydroxide and related compounds into each boiler for the purposes of reducing build-up of particulate matter on the interior boiler surfaces, to facilitate proper heat transfer and other boiler operation, and to reduce the particulate matter required to be removed from boiler surfaces during soot blowing and other boiler cleaning operations. The rate of additive injection is not large, generally on the order of 1 gallon per approximately 2,500(±500) gallons of fuel oil (this is approximately 0.04% by volume). The permit requires that emission tests be conducted while injecting additives consistent with normal operating practices.

3. Response:

As a result of these comments, **Specific Condition A.20.**, is hereby changed:

From: A.20. Fuel Records and Sampling Protocol. In conjunction with specific condition A.13.(b), when the CEMS becomes disabled for periods exceeding 60 minutes, the following information shall be collected:

a. **Fuel Records.** For each boiler, the quantity of fuel(s) fired or when co-firing, the ratio of fuel oil to natural gas shall be recorded.

b. **Sampling Protocol.** A fuel oil sample shall be collected hourly, by taking a small portion of the fuel fired and pouring it into a container. On a daily basis the fuel oil from this container shall be analyzed for heating value and sulfur content. Analysis for sulfur content shall be performed using one of the following: ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s).

To: A.20. Fuel Records and Sampling Protocol. The owner or operator shall create and maintain for each emission unit hourly records of the amount of each fuel fired, the ratio of fuel oil to natural gas if co-fired, and the heating value and sulfur content of each fuel fired. These records must be of sufficient detail to identify the testing requirements of specific condition A.18, and, when applicable, demonstrate compliance with the requirements of condition A.13, paragraph b, of this permit. Fuel oil heating value and sulfur content shall be determined by taking a daily sample of fuel fired, combining those samples into a monthly composite and analyzing a representative sample of the composite. Analysis for sulfur content shall be performed using one of ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s). Comparison of the as-fired fuel oil sulfur content shall be made and recorded monthly upon receipt of each monthly composite analysis.

4. Response:

As a result of these comments, **Appendix I-1**, is hereby changed by adding:

15. Evaporation of chemical cleaning wastes generated from boiler cleaning operations of Fossil Steam Units 1 or 2.

III. Additional Changes.

There are no additional changes to the permit.

IV. Conclusion

The Department is issuing the PROPOSED Title V Permit, No. 0250003-005-AV, with the changes noted above.

STATEMENT OF BASIS

Florida Power & Light
Turkey Point Fossil Plant
Facility ID No. 0250003
Dade County

Title V Air Operation Permit Renewal **PROPOSED Permit No. 0250003-005-AV**

This Title V Air Operation Permit Renewal 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 in 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.

The Turkey Point Title V Source is composed of two separate co-located power plants: the Fossil Plant and the Nuclear Plant. This permit, No. 0250003-005-AV, addresses only the operations at the Fossil Plant. The (non-nuclear) operations at the Nuclear Plant are addressed in a separate Title V permit, No. 0250003-004-AV.

The Fossil Plant consists of two fossil steam generating units, and five "black start" diesel peaking generators. The boilers began operation in 1967 and 1968. To reduce pollution, both boilers incorporate "low-NOx burners" and mechanical cyclone dust collectors.

Emissions units 001 and 002 consist of two Foster-Wheeler 440 MW Class Steam Generating Units that burn a variable combination of natural gas, used oil from FP&L operations, & No. 6 fuel oil. Stack height is 400 feet. The units are equipped with low excess air burners and UOP Air Correction Division multiple cyclones with reinjection. Visible emissions are monitored by a transmissometer in the stack. The units are subject to NOx RACT. Sulfur dioxide, carbon dioxide, nitrogen oxides, visible emissions, and gas flow rate are all continuously monitored. The units began operation in April 1967 (001) and April 1968 (002), respectively. CAM does not apply.

FPL may inject additives such as magnesium oxide, magnesium hydroxide and related compounds into each boiler for the purposes of reducing build-up of particulate matter on the interior boiler surfaces, to facilitate proper heat transfer and other boiler operation, and to reduce the particulate matter required to be removed from boiler surfaces during soot blowing and other boiler cleaning operations. The rate of additive injection is not large, generally on the order of 1 gallon of additive per approximately 2,500 (\pm 500) gallons of fuel oil (this is approximately 0.04% by volume). The permit requires that emission tests be conducted while injecting additives consistent with normal operating practices.

Emissions unit 003 consists of five MKW Powersystems, Inc. Model EMD MP-45 "black start" emergency diesel generators. The generators support boilers 001 and 002 as "peaking units", and, in the event the facility loses primary power, they serve as a backup. These units fire No. 2 fuel oil. The generators commenced operation in April, 1968. CAM does not apply.

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 note below the permitted capacity condition clarifies this. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.

This facility is allowed to co-fire natural gas with fuel oil in any ratio that will cause emissions to not exceed the sulfur dioxide limitation of this permit. The permit specifies that compliance with the sulfur dioxide standard shall be based on the total heat input from all liquid and gaseous fuels burned. The permit also requires that the sulfur dioxide emission limitation shall apply at all times including startup, shutdown, and load change. However, excess emissions of sulfur dioxide are allowed during malfunctions in accordance with the excess emissions conditions of this permit, which are based on Rule 62-210.700, F.A.C. Malfunctions that could occur and affect sulfur dioxide emissions include unexpected loss of natural gas supply at the plant, failure of the fuel feed system or burner failure.

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

Based on the Title V Air Operation Permit Renewal application received July 3, 2003, this Title V Source is a major source of hazardous air pollutants (HAPs).

Florida Power & Light
Turkey Point Fossil Plant
Facility ID No. 0250003
Dade County

Title V Air Operation Permit Renewal
PROPOSED Permit No. 0250003-005-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

Compliance Authority:

Dade County Department of Environmental Resources Management
33 Southwest Second Avenue, Suite 900
Miami, Florida 33130-1540

Telephone: 305/372-6925
Fax: 305/372-6954

Title V Air Operation Permit Renewal
PROPOSED Permit No. 0250003-005-AV

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Department of Environmental Protection

Twin Towers Office Building
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Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

Permittee:

Florida Power & Light
Turkey Point Fossil Plant
700 Universe Boulevard
Juno Beach, Florida 33408

PROPOSED Permit No. 0250003-005-AV

Facility ID No. 0250003

SIC Nos. 49, 4911

Project: Title V Air Operation Permit Renewal

The purpose of this permit is for the operation of the Turkey Point Fossil Plant, and to renew Title V Air Operation Permit No. 0250003-001-AV. This facility is located at 9.5 miles east of Florida City on SW 344 Street, Florida City, Dade County; UTM Coordinates: Zone 17, 567.2 km East and 2813.2 km North; Latitude: 25° 26' 09" North and Longitude: 80° 19' 52" West.

This Title V Air Operation Permit Renewal 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 operate the Turkey Point Fossil Plant as described in the application in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

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

Appendix U-1, List of Unregulated 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)

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)

Figure 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM REPORT (version dated 7/96)

Phase II Permit Application dated 7/03/03

Order of the Department's Secretary dated April 24, 1984

ASP Number 97-B-01

Effective Date: January 1, 2004

Renewal Application Due Date: July 5, 2008

Expiration Date: December 31, 2008

Michael G. Cooke, Director
Division of Air Resource Management

MC/sms/rlb

Section I. Facility Information

Subsection A. Facility Description

The Turkey Point Title V Source is composed of two separate co-located power plants: the Fossil Plant and the Nuclear Plant. This permit, No. 0250003-005-AV, addresses only the operations at the Fossil Plant. The (non-nuclear) operations at the Nuclear Plant are addressed in a separate permit, No. 0250003-004-AV.

The Fossil Plant consists of two fossil steam generating units, and five "Black Start" diesel peaking generators. The boilers began operation in 1967 and 1968. To reduce pollution, both boilers incorporate "low-NOx burners" and mechanical cyclone dust collectors. Also included in this permit are miscellaneous unregulated and insignificant emissions units and activities.

Based on the Title V Air Operation Permit Renewal application received July 3, 2003, this Title V Source is a major source of hazardous air pollutants (HAPs).

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
001	440 MW Boiler (EPA ID # PTP1)
002	440 MW Boiler (EPA ID # PTP2)
003	(5) 2.75 MW Diesel Peaking Generators
004	Unregulated Emissions Units and Activities (See Appendix U-1.)

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 Renewal Application received July 3, 2003

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. 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. 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) PMP 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
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

b. The Permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule F.A.C. 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 Activities, is a part of this permit.

[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and Activities. Appendix I-1, List of Insignificant Emissions Units and 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. 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.
[Rule 62-296.320(1)(a), F.A.C.]

8. Not Federally Enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

1. Paving of roads, parking areas and equipment yards;
 2. Landscaping and planting vegetation;
 3. Maintenance of paved areas;
 4. Regular mowing of grass and care of vegetation;
 5. Limiting access to plant property by unnecessary vehicles;
 6. Bagged chemical products are stored in weather-tight buildings until they are used. Spills of powdered chemical products are cleaned up as soon as possible.
 7. Vehicles are restricted to slow speeds on the plant site.
- [Rule 62-296.320(4)(c)2., F.A.C.; Proposed by 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 the 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 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)}

11. The permittee shall submit all compliance, annual operating reports and other correspondence required of this permit to:

Dade County Department of Environmental Resources Management (DERM)
33 Southwest Second Avenue, Suite 900
Miami, Florida 33130-1540
Telephone: 305/372-6925
Fax: 305/372-6954

Note: if acceptable to the agency, applicable correspondence may be submitted by electronic mail.

12. Unless otherwise directed, reports, data, notification, certifications, or other correspondence required of the United States Environmental Protection Agency should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides, & Toxics Management Division

Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163

Note: if acceptable to the agency, applicable correspondence may be submitted by electronic mail.

13. Certification by Responsible Official (R.O.). 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, that 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 Units and Conditions

Subsection A.

<u>E.U. ID No.</u>	<u>Brief Description</u>
001	440 MW Boiler (EPA ID # PTP1)
002	440 MW Boiler (EPA ID # PTP2)

Emissions units 001 and 002 consist of two Foster-Wheeler 400 MW Class (440 MW gross capacity) Steam Generating Units that burn a variable combination of natural gas, used oil from FP&L operations, No. 6 and No. 2 fuel oils, and propane. Power ratings are nominal and are not limiting of either unit. The height of each of the two stacks is 400 feet. Each unit is equipped with low excess air burners and UOP Air Correction Division multiple cyclones with reinjection. Visible emissions are monitored by a transmissometer in each stack. The units are subject to NO_x RACT. Sulfur dioxide, carbon dioxide, nitrogen oxides, visible emissions, and gas flow rate are all continuously monitored. Unit 001 began commercial operation in April 1967; unit 002 in April 1968.

{Permitting note: The emissions units are regulated under Acid Rain-Phase II, Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input - Rule 62-296.405, F.A.C., and RACT Requirements for Major VOC- and NO_x-Emitting Facilities - Rule 62-296.570, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. For each emissions unit, the maximum heat input (mmBtu per Hour) shall not exceed 4,150 mmBtu per hour while firing natural gas, or 4,000 mmBtu per hour while firing fuel oil. If such a blend of fuels is fired, the heat input shall be prorated based on the percent heat input of each fuel. Power ratings are nominal and are not limiting of either unit. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{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.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.6. [Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operations – Fuels. The only fuels allowed to be burned are No. 2 fuel oil, No. 6 residual fuel oil, natural gas, propane, and on-specification used oil generated from FPL operations.

The used oil shall comply with the requirements given in specific condition A.22. Additionally, no more than 750,000 gallons shall be burned annually.

FPL may inject additives such as magnesium oxide, magnesium hydroxide and related compounds into each boiler for the purposes of reducing build-up of particulate matter on the interior boiler surfaces, to facilitate proper heat transfer and other boiler operation, and to reduce the particulate matter required to be removed from boiler surfaces during soot blowing and other boiler cleaning operations. The rate of additive injection is not large, generally on the order of 1 gallon per approximately 2,500(±500) gallons of fuel oil (this is approximately 0.04% by volume). The permit requires that emission tests be conducted while injecting additives consistent with normal operating practices.

[Rule 62-4.160(2), 62-210.200, 62-213.440(1), F.A.C., AO13-238939, AO13-238932]

A.4. Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200(PTE), 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 time(s) for Specific Conditions A.5.-A.10. are based on the specified averaging time of the applicable test method.}

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

[Rule 62-296.405(1)(a), F.A.C.; and, authorized by Order of the Department's Secretary dated April 24, 1984.]

A.6. Visible Emissions - Soot Blowing and Load Change. 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. Additionally, visible emissions above 60 percent opacity shall be allowed for not more than four, six minute periods, during the 3-hour period of excess emissions.

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.

[Rule 62-210.700(3), F.A.C.]

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. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 1.1 pounds per million Btu heat input, as measured by applicable compliance methods. Compliance shall be based on the total heat input from all liquid and gaseous fuels burned. The sulfur dioxide emission limitation shall apply at all times including startup, shutdown, and load change. See specific condition A.13. [Rules 62-213.440, F.A.C., and AO13-238939 and AO13-238932, Dade County Code Section 24-17]

A.10. Nitrogen Oxides. NOx emissions from each boiler stack shall not exceed the following limits based on a 30-day rolling average:

	<u>Natural Gas</u>	<u>Fuel Oil</u>
lbs./mmBtu	0.40	0.53
lbs./hour	1,610	2,041

These limits shall apply at all times except during periods of startup, shutdown, or malfunction as provided by Rule 62-210.700, F.A.C. Compliance shall be based on the use of a CEMS. See specific condition A.14.

[Rule 62-296.570(4)(b)2, and (c), F.A.C.]

Monitoring and Testing Requirements

{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.11. Visible Emissions. 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.12.

[Rule 62-296.405(1)(e)1., F.A.C.]

A.12. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

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.13. Sulfur Dioxide. The permittee shall demonstrate compliance with the sulfur dioxide limit of specific condition A.9 of this permit by the following:

a. Through the use of CEMS installed, 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. A relative accuracy test audit of the SO₂ CEMS shall be conducted at least annually. Compliance shall be demonstrated on a 3-hour rolling average.

b. In the event the CEMS becomes temporarily inoperable or interrupted, the fuel oil sulfur content and the maximum fuel oil to natural gas firing ratio is limited to that which was last used to demonstrate compliance prior to the loss of the CEMS. Alternatively, the boilers may fire 100 percent fuel oil with a maximum sulfur content of 1.0 percent by weight, or less or 100 percent natural gas. See specific condition A.18.

[Rule 62-204.800, 62-213.440, 62-296.405(1)(c)3., F.A.C., AO13-238932, AO13-238939]

A.14. Nitrogen Oxides. The permittee shall operate, maintain, and calibrate a CEMS to determine compliance with the NO_x emission limits as specified above. Determination of compliance shall be in accordance with the testing, compliance, emission monitoring, reporting, recordkeeping, certification and quality assurance provisions of 40 CFR 75.

[Rule 62-296.405(1)(f), F.A.C., AO13-238939, AO13-238932]

A.15. 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.

[Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

A.16. 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.17. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

- a. only gaseous fuel; or
- b. gaseous fuel in combination with any amount of liquid fuel for less than 400 hours per year; or
- c. only liquid fuel for less than 400 hours per year.

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

A.18. Operating Conditions During Testing - PM and VE. Compliance testing during sootblowing and steady-state operation for particulate matter and visible emissions shall be conducted at least once annually, if liquid fuel is fired for more than 400 hours. A visible emissions test shall be conducted during one run of each particulate matter test. Testing shall be conducted as follows:

- a. When Burning Fuel Oil Up To 1% Sulfur. When only fuel oil containing less than or equal to 1% sulfur, by weight, is fired (or co-fired with natural gas) in an emissions unit, particulate matter and visible emissions tests during sootblowing and steady-state operation shall be performed on such emissions unit while firing solely fuel oil containing at least 90% of the average sulfur content of the fuel oils fired in the previous 12 month period, except that such test shall not be required to be performed during any year that testing is performed in accordance with specific condition A.18.b.
- b. When Burning Fuel Oil Greater Than 1% Sulfur. When fuel oil containing greater than 1% sulfur, by weight, is co-fired with natural gas in an emissions unit, particulate matter and visible emissions tests during sootblowing and steady-state operation shall be performed as soon as practicable, but in no event more than 60 days after firing such fuel oil, while co-firing such oil with the appropriate proportion of natural gas required to maintain SO₂ emissions between 90 to 100% of the SO₂ emission limit (corresponding to 0.99 and 1.1 lb/mmBtu heat input). Following successful completion of such PM and VE testing, further PM and VE testing shall not be required during the next 12 months unless fuel oil is fired that contains greater than 0.20% sulfur above the percentage sulfur concentration fired during the most recent co-firing test. If fuel oil is co-fired containing greater than 0.20% sulfur above the percentage sulfur concentration fired during the most recent co-firing test, additional PM and VE tests shall be performed as described above as soon as practicable, but in no event more than 60 days after firing such higher sulfur fuel oil.

[Rules 62-4.070(3), 62-213.440, 62-296.405(1)(c)3. and 62-297.310(7)(a)9., F.A.C.]

A.19. 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]

Recordkeeping and Reporting Requirements

A.20. Fuel Records and Sampling Protocol. The owner or operator shall create and maintain for each emission unit hourly records of the amount of each fuel fired, the ratio of fuel oil to

natural gas if co-fired, and the heating value and sulfur content of each fuel fired. These records must be of sufficient detail to identify the testing requirements of specific condition A.18, and, when applicable, demonstrate compliance with the requirements of condition A.13, paragraph b, of this permit. Fuel oil heating value and sulfur content shall be determined by taking a daily sample of fuel fired, combining those samples into a monthly composite and analyzing a representative sample of the composite. Analysis for sulfur content shall be performed using one of ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s). Comparison of the as-fired fuel oil sulfur content shall be made and recorded monthly upon receipt of each monthly composite analysis. [Rules 62-4.070(3), 62-213.410, 62-213.440 and 62-296.405(1)(c)3., F.A.C.]

A.21. 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.22. Used Oil. Burning of on-specification used oil is allowed by these emissions units in accordance with all other conditions of this permit and the following conditions:

a. **On-specification Used Oil Emissions Limitations:** This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. **Quantity Limitation:** This emissions unit is permitted to burn "on-specification" used oil that is generated by FP&L in the production and distribution of electricity, not to exceed 750,000 gallons during any consecutive 12 month period.

c. **PCB Limitation:** 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. **Operational Requirements:** On-specification used oil with a PCB concentration of greater than or equal to 2, and less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of greater than or equal to 2 ppm shall not be burned during periods of startup or shutdown.

e. Testing Requirements: 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 and 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).

f. Record Keeping Requirements: 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:

(1) The gallons of on-specification used oil generated 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 Requirements: The owner or operator shall submit to DERM, within thirty days of the end of each calendar quarter, the analytical results and the total amount of on-specification used oil generated and burned during the quarter.

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.

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

A.23. Additionally, all conditions of Subsection C. apply to these emissions units.

Subsection B.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
003	(5) 2.75 MW Diesel Generators

This emissions unit consists of five MKW Powersystems, Inc. Model EMD MP-45 "black start" emergency diesel generators. The generators support boilers 001 and 002 as "peaking units", and, in the event the facility loses primary power, they serve as a backup. These units fire No. 2 fuel oil. The emissions from the generators are limited by the fuel type. The units commenced operation in April, 1968.

{Permitting note: These units are regulated under Reasonably Available Control Technology (RACT) - Requirements for Major VOC- and NOx-Emitting Facilities Rule 62-297.570, F.A.C.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input to each generator shall not exceed 24.89 mmBtu per hour.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 62-296.405, F.A.C.]

{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.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.6.

B.3. Methods of Operation - Fuels. The only fuel authorized to be burned in this unit is new No. 2 fuel oil. The sulfur content shall not exceed 0.5 percent by weight.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C., and requested by applicant.]

B.4. Hours of Operation. The generators may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200, 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 time(s) for Specific Conditions B.5.-B.6. are based on the specified averaging time of the applicable test method.}

B.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.]

B.6. Nitrogen Oxides. NOx emissions shall not exceed 4.75 lb per million Btu heat input. These limits shall apply at all times except during periods of startup, shutdown, or malfunction as provided by Rule 62-210.700, F.A.C.
[Rule 62-296.570(4)(b)7. and (c), F.A.C.]

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.}

B.7. Visible Emissions: The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-297.310(7)(a), F.A.C.]

B.8. NOx Emissions: For units that are not equipped with a continuous emissions monitoring system (CEMS) for NOx, compliance with the emissions testing in accordance with applicable EPA Reference Methods from Rule 62-297.401, F.A.C., or other methods approved by the Department in accordance with the requirements of Rule 62-297.620, F.A.C., except as otherwise provided in Rule 62-296.570(4)(b), F.A.C. Annual emission testing shall be conducted during each federal fiscal year (October 1 - September 30). *Annual compliance testing for NOx while firing oil is unnecessary for units operating less than 400 hours in the current federal fiscal year.*
[Rule 62-296.570(4)(a)3., F.A.C.]

B.9. The test method for NOx shall be EPA Method 7 or 7E, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.570(4)(a)3. and 62-297.401(7), F.A.C.]

B.10. Additionally, all conditions of Subsection C. apply to this emissions unit.

Subsection C. Common Conditions

This section contains conditions applicable to the emissions units described in Subsections A. and B.

Excess Emissions

C.1. 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.]

C.2. 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.]

C.3. 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

C.4. 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

C.5. 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.]

C.6. Operating Rate During Testing. Testing of emissions shall be conducted with each 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 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.]

C.7. 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.]

C.8. 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. (Not applicable.)

b. (Not applicable.)

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. (See attachment).

(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.]

C.9. 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.]

C.10. 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.

1. (Not applicable.)

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: 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
- 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.
 6. (Not applicable.)
 7. (Not applicable.)
 8. (Not applicable.)
 9. (See Specific Condition C.14.)
 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.
- (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)(a)2., 3., 4., 5., 10., (b) & (c), F.A.C.; SIP approved]

Recordkeeping and Reporting Requirements

C.11. In the case of excess emissions resulting from malfunctions, the permittee shall notify the Dade County Department of Environmental Resources Management 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 Dade County Department of Environmental Resources Management.
[Rule 62-210.700(6), F.A.C.]

C.12. Submit to the Dade County Department of Environmental Resources Management a written report of emissions in excess of emission limiting standards 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 permittee 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.]

C.13. 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 and Dade County Department of Environmental Resources Management on the results of each such test.

(b) The required test report shall be filed with the Department and Dade County Department of Environmental Resources Management 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 and Dade County Environmental Resources Management 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.
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.]

C.14. The owner or operator shall notify the Dade County Department of Environmental Resources Management, 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.

[Rule 62-297.310(7)(a)9., F.A.C.]

Section IV. Acid Rain Part

Turkey Point Fossil Plant -- Facility ID No. 0250003
Operated by: Florida Power and Light Company
ORIS code: 621

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

E.U.

<u>ID No.</u>	<u>Description</u>
001	440 MW Boiler (EPA ID # PTP1)
002	440 MW Boiler (EPA ID # PTP2)

A.1. The Acid Rain Part 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), dated 06/16/03.

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

A.2. Sulfur dioxide (SO₂) allowance allocations requirements for each Acid Rain unit:

E.U. ID No.	EPA ID No.	Year	2004	2005	2006	2008	2008
001	PTP1	SO ₂ allowances, under Table 2 of 40 CFR 73	5868*	5868*	5868*	5868*	5868*
002	PTP2	SO ₂ allowances, under Table 2 of 40 CFR 73	5911*	5911*	5911*	5911*	5911*

*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.

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.

a. 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.

b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

c. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

A.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 62-214.370(4), and Rule 62-213.413, F.A.C.]

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

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

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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 activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and Activities

1. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
2. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 CFR Part 82.
3. Vacuum pumps in laboratory operations.
4. Equipment used for steam cleaning.
5. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
6. Equipment used exclusively for space heating, other than boilers.
7. Laboratory equipment used exclusively for chemical or physical analyses.
8. Brazing, soldering or welding equipment.
9. One or more emergency generators located within a single facility provided:
 - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
 - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
10. One or more heating units and general purpose internal combustion engines located within a single facility provided:
 - a. None of the heating units or general purpose internal combustion engines is subject to the Federal Acid Rain Program; and

Appendix I-1, List of Exempt Emissions Units and Activities

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- b. Total fuel consumption by all such heating units and general purpose internal combustion engines within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
11. Fire and safety equipment.
12. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
- a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
13. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
14. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

Steam and Air Systems:

Steam Drum 3" Relief Valves
Steam Drum " Valves to Vent
Main Steam 2 ½" Relief Valves with Silencer
Main Steam Stop Valve Vents
Main Steam 1" Free Blow and Vent
Reheat Outlet Header 2" Vents
Reheat Outlet Header 6" relief Valves
Hot Reheat 2" Vents
Cold Reheat at Inlet Header 6" Relief Valves
Blowdown Tank 16" Silencer Tank
Main Steam 6" Relief Valve at Desuperheater
After Condenser ½" Vent from Drainer
After Condenser 2" Vents
Hogging Ejector 10 Exhaust Head with Silencer
Moisture Separator 10" Exhaust Head with Silencer
Moisture Separator 1" Vent
Vacuum Tanks 2A, B, C, & D 4" Vents
Steam Relief Valves at Steam Seal Regulator
Boiler Blowdown Heat Exchanger 1" Vent
Boiler Feed Condensate, Heater Drains
Condensate Storage Tank Vent
Condensate Recovery Tank Vents
Condensate Recovery Cooler – ¾" Vent
Condensate Recovery Flash Tank – 8" Relief Valve
Vent Condenser ½" Vent
After Condenser ½" Vent
Inter-Condenser ½" Vent
Boiler Feeder Pumps 1" Vent

Appendix I-1, List of Exempt Emissions Units and Activities

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Boiler Feed Condensate, Heater Drains

Boiler Feeder Pumps Relief Valves
Extraction Heater 3" & 4" Relief Valves
Gland Steam Condenser Air Ejector
Extraction Heaters ¾" & 1" Vents
Hydrazine Storage Tank
Ammonia Storage Tank
Phosphate Storage Tank

Service Water, Cooling Water, and Fire Protection

Water Storage Tank (500,000 Gal.) 6" Vent
Closed C.W. Heat Exchanger A&B 1" Vent
F.D. Fan Hydraulic Coupling A & B ¾" Vent
H₂ Coolers A, B, C, & D ½" Vent
Boiler Feed Pump Hydrogen Coupling Coolers ¾" Vent
Cooling Water Surge Tank 8" Vent
Closed Cooling Water System Units A and B ¾"
Boiler Feed Pump seal Piping Cooler Vents

Fuel Oil, Lube Oil, and Lube Oil Purification

Fuel Oil Storage Tanks (256,000 BBL.) 6" Vents
Fuel Oil Metering Tanks (12,000 BBL.) 6" Vents
Fuel Oil Storage Tanks (256,000 BBL.) Draw-off Sump
Blowback Tank at Metering Tank 1" Relief Valve
Blowback Tank at Metering 2" Valve
Blowback Tank at Fuel Oil Burner Pumps – 1" Relief Valves
Blowback Tank at Fuel Oil Burner Pumps – 2" Valves
Fuel Oil Lines 1: Relief Valves
Fuel Oil Lines ¾" Valves
Blowback Tanks at Each Level of Burners – 2" Vent
Blowback Tanks at Each Level of Burners- 1" Relief Valve
Fuel Oil Burner Booster Pump Vents
8" Fuel Oil Line at Heaters Vents
Station Air at all Blowback Tanks 2"Vent
Generator Loop Seal Tank Exhaust Head- 4"
Oil Mist Eliminator 6" Vent
Lube Oil Coolers ½" Vent
Lube Oil Conditioner Filter Vent
Lube Oil Piping High Point Filter Vent
Magnesium Hydroxide Tank (Fuel Additive)

Lime Slurry, Caustic Wash, Nitrogen Purge Instrument Air

Nitrogen Release Valve
High Pressure Heater Nitrogen Vents
Steam Drum Nitrogen Vent
Secondary S.H. Outlet Nitrogen Vent

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Primary S.H. Outlet Nitrogen Vent
Instrument Air/Air Receiver/Relief Valves
Instrument Air After Cooler Relief Valves
Station Air After Cooler Relief Valves
Station Air/Air Receiver/Relief Valves
Slurry Mixing Tank
Slurry Service Tank
Soda Ash Service Tank
Soda Ash Mixing Tank

Miscellaneous Buildings HVAC

Stores Building
Control Building
Service Building
North Gate Guard House
Switchyard Buildings
CEM Building
Switchgear Room
Water Treatment/Lab
Elevators
Administration Building

Sanitary Vents/Stacks

Control Building
Recreation Building
Service Building
Administration Building
Port-a-Johns
Sheet Metal Shop
Chemical Lab
Chemical Storage Building
Switchyard Control Building
Battery Room
Paint and Lube Oil Building
Dry Storage Building
Electrical Building
Warehouses
Boiler Feed Pump Building
Chlorination Building
I&C Building
Weld Shop

Kitchen Vent/Exhaust Systems

Control Room
Administration Building
Recreation Pavilion

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CEM Equipment
Monitoring Gases

Gas Bottle Storage
Nitrogen, CO₂, Hydrogen, Oxygen, Acetylene, Argon
Oily Waste Water Sumps
Filling Station 2000 Gallon Diesel Fuel Tank 2" Vent
2000 Gallon Unleaded Fuel Tank 2" Vent

Hazardous Waste Storage Area
Sealed Drums and Containers
Natural Gas Gas Metering Station
Ignition Gas (Liquid Propane)
Propane Storage Tank

Water Treatment
Chemical Storage Area
Waste Water Treatment
Storm Water Sumps
Oil/Water Separator Tank Vent
Waste Neutralization Basin
Storm Water Basin
Ash Disposal System

Miscellaneous Activities
Home Heating and comfort Heating with a gross maximum heat output of less than one million BTU/hour
Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight
Vacuum Pumps used in laboratory operations
Equipment used for Steam Cleaning
Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics of their products having a density of 20 pounds per cubic foot or more
Equipment used exclusively for space heating, other than boilers
Laboratory equipment used exclusively for chemical and physical analysis
Brazing, soldering or welding equipment
Laundry Dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents
Fire and Safety Equipment
Surface Coating facilities in ozone attainment areas (provided that 6.0 gallons of coatings per day are applied)
Degreasing units using heavier than air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
Plant Grounds Maintenance

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Routine Maintenance/ Repair Activities

Non-Halogenated Solvent Cleaning Operations

Use of Spray Cans or solvents for routine maintenance activities

Internal Combustion Engines which Drive Compressors, Generators, Water Pumps or Other Auxiliary Equipment

Transformers, Switches, and Switchgear, Processing and Venting

Electrically Heated Equipment Used for Heat Treating, Tracing, Drying, Soaking, Case Hardening, or Surface Conditioning

Air Compressors and Centrifuges Used for Compressing Air

Storage of Products in Sealed Containers

Painting of Plant Equipment

Miscellaneous Mobile Vehicle Operation

Cars, Light Trucks, Heavy Duty Trucks, Back Hoes, Tractors, Forklifts, Cranes, Etc.

Miscellaneous Mobile Equipment Operation

Compressors, Chain Saws, Small Generators, (<100KW) Welding Machines, Electric Saws and Drills, Etc.

15. Evaporation of chemical cleaning wastes generated from boiler cleaning operations of Fossil Steam Units 1 or 2.

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

Florida Power & Light

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Unregulated Emissions Units and 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 following emissions units and activities are neither “regulated emissions units” nor “insignificant emissions units”:

E.U. ID No. Brief Description of Emissions Units and/or Activity

004	20,000 gallon No. 2 fuel oil tank
	25,000 gallon No. 2 fuel oil tank
	2,000 gallon unleaded gasoline tank
	2,000 gallon vehicular diesel tank
	11,256,000 gallon No. 5 & 6 fuel oil tank, installed 07/67
	11,256,000 gallon No. 5 & 6 fuel oil tank, installed 07/68
	504,000 gallon No. 5 & 6 fuel oil tank, installed 07/68
	504,000 gallon No. 5 & 6 fuel oil tank, installed 07/68
	1,500 gallon mineral acid tank, installed 04/95
	Hydrazine tank
	Ammonia tank
	Phosphate tank
	Off-loading of Fuel from Tankers
	Propane Storage Tank
	Sandblast Shed
	Unleaded gasoline dispensing facility with a monthly gasoline throughput of less than 20,000 gallons.

Appendix H-1, Permit History/ID Number Changes

Florida Power & Light
Turkey Point

PROPOSED Permit No.: 0250003-005-AV
Facility ID No.: 0250003

Permit History

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u>	<u>Revised Date</u>
-001	440 MW Steam Generating Unit #1	AO13-238939	12/23/93	12/01/98		
-002	440 MW Steam Generating Unit #2	AO13-238932	01/07/94	12/01/98		
-003	Five 2.75 MW Diesel Generators	new unit				
All	Facility	0250003-001-AV	1/1/1999	12/31/03		
All	Facility	0250003-005-AV	1/1/2004	12/31/008		

ID Number Changes:

From: **Facility ID No.:** 50DAD130003

To: **Facility ID No.:** 0250003
