

# Department of Environmental Protection

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

Colleen M. Castille Secretary

July 8, 2004

Mr. Michael Lentz Responsible Official Progress Energy Florida, Inc. P.O. Box 14042 MAC: BP44 St. Petersburg, Florida 33733

Re:

PROPOSED Title V Permit No. 1030013-002-AV

**Bayboro Power Plant** 

Dear Mr. Lentz:

One copy of the PROPOSED Title V Air Operation Permit Renewal for the Bayboro Power Plant located at 13<sup>th</sup> Avenue and 2<sup>nd</sup> Street South, St. Petersburg, Pinellas County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit renewal has become a PROPOSED permit renewal.

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/permitting.htm

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit renewal is made by the USEPA within 45 days, the PROPOSED permit renewal will become a FINAL permit renewal no later than 55 days after the date on which the PROPOSED permit renewal was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit renewal, the FINAL permit renewal will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.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 Syed Arif at 850/921-9528.

Sincerely,

Trina L. Vielhauer, Chief Bureau of Air Regulation

Din I Villain

**Enclosures** 

Copy furnished to:
Mr. Jerry Kissel, SWD
Mr. Gary Robbins, Pinellas County
USEPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

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| 1,6  | Mr. Michael   | Lentz   |                              |  |  |  |  |  |  |  |  |
| 7000 | Post Office   | Serit To. Mr. Michael Lentz  Street, Apt. No., or PO Box No.  Post Office Box 14042  City, State, ZIP+4 St. Petersburg, Florida 33733 |                              |  |  |  |  |  |  |  |  |
| Ĺ    | PS Form 3800, May 2000  |   | See Reverse for Instructions |  |  |  |  |  |  |  |  |

#### PROPOSED Permit Renewal Determination Progress Energy Florida, Inc. Bayboro Power Plant Title V Permit Renewal No. 1030013-002-AV

#### I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" to the Progress Energy Florida, Inc. for the for the Bayboro Power Plant , located at 13<sup>th</sup> Avenue and 2<sup>nd</sup> Street South, St. Petersburg, Florida, Pinellas County, was clerked on May 20, 2004. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was published in The St. Petersburg Times on Sunday May 23, 2004. The DRAFT Title V Air Operation Permit Renewal was available for public inspection at the Department's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was received on June 1, 2004.

#### II. Public Comment(s).

No comments were received from the citizens, environmental groups, municipalities or other agencies.

#### III. Applicant's Comments

Comments were received by the applicant by electronic mail on June 16, 2004 and confirmed by a letter received on June 25, 2004. Comments were very minor. The comments in general were considered not significant enough to require the issuance of a revised DRAFT permit. The key requests are proposed changes to certain permits conditions as follows:

**A. 22.** Not federally enforceable. <u>Annual Operating Reports</u>. Submit to the Southwest District office, Air Compliance Section of the Department of Environmental Protection, and the PCDEM, Air Quality Division, each calendar year, on or before March 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, for the preceding calendar year.

The annual operating report shall be based on the following:

- (a) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking units, shall be based on a weighted 12-month average (calendar year) and be calculated from the fuel delivery receipts and the vendors fuel oil analysis.
- (b) Until further notice by the PCDEM, Progress Energy Florida, Inc. shall calculate annual emissions (pounds per hour and tons per year), for the Annual Operating Report, by multiplying the total million Btu from fuel usage by the following emissions factors:

#### **Emissions Factors for No. 2 Fuel Oil**

|                         | Pound per MMBtu  |
|-------------------------|------------------|
| Particulate Matter (PM) | 0.061-(Total)    |
| $PM_{10}$               | 0.48 PM          |
| Carbon Monoxide         | 0.048            |
| Sulfur Dioxide          | 1.01(S)          |
| Nitrogen Oxides         | <del>0.698</del> |
| Hydrocarbons (TOC)      | <del>0:017</del> |

#### PROPOSED Permit Renewal Determination Progress Energy Florida, Inc. Bayboro Power Plant

Title V Permit Renewal No. 1030013-002-AV

"S" denotes sulfur content, percent by weight. The sulfur dioxide emissions shall be based on a weighted 12 month average "S" value.

The permittee will submit the Annual Operating Report, as required by Rule 62-210.370(3), F.A.C., using the most current submittal process and format provided by the Department. The most current emission factors (e.g. the latest edition of EPA AP-42) shall be used in the calculation of annual emissions of Total Particulate Matter (PM), Filterable PM, Carbon Monoxide, Sulfur Dioxide, Nitrogen Oxides and Volatile Organic Compounds.

[Rule 62-210.370(3), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

Additionally, the applicant wanted to revise Appendix I-1 to exclude Unit No. 9 as an insignificant emission unit and/or activity. Emission Unit No. 9, according to the applicant has been torn down.

#### IV. Department Response:

The Department agrees with the applicant's requested changes to conditions A. 22. The Department will exclude Unit No. 9 in Appendix I-1 as an insignificant emission unit.

#### V. Conclusion.

The permitting authority hereby issues PROPOSED Permit Renewal No. 1030013-002-AV, with the changes noted above.

#### STATEMENT OF BASIS

Progress Energy Florida Bayboro Power Plant Facility ID No.: 1030013 Pinellas County

Title V Air Operation Permit Renewal **PROPOSED Permit No.:** 1030013-002-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, and 62-213. 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.

The facility's permitted emissions units are four No. 2 fuel oil fired combustion turbine peaking units. In addition, the facility may have relocatable diesel fired generator(s). There are no Acid Rain Emissions Units at this facility.

The No. 2 fuel oil fired combustion turbines are manufactured by Pratt & Whitney (model number FT4C-1LF) and are designated as Bayboro Peaking Units #1, #2, #3 and #4. The turbines are **not** subject to 40 CFR 60, Subpart GG, the only standards these emissions units are subject to are opacity and percent sulfur content of the fuel oil. Each combustion turbine has two (2) turbine engines with each engine having its own stack. The manufacturers fuel flow and heat input ratings at 30°F for each turbine is 5,609 gallons per hour of No. 2 fuel oil (corresponds to approximately 774 million Btu per hour). The actual heat input rate of the turbine is a function of the ambient temperature. These combustion turbines are used as peaking units to run a nominal 56.7 MW generator (each). Emissions from the combustion turbines are uncontrolled. The Department has determined that the appropriate visible emissions (VE) testing frequency for the four combustion turbines is a VE test upon exceeding 400 hours of operation on fuel oil in any federal fiscal year (October 1 through September 30). This frequency is justified by the low historical use of fuel oil for these emissions units and the previous VE tests, which documented compliance while firing fuel oil. Moreover, no Method 9 tests since 1994 on these emissions units have resulted in an opacity measurement greater than 5% opacity. Regarding hours of operation, these emissions units had not significantly exceeded 400 hours per year (going back to 1994), until the summer of 1998. The highest turbine hours of operation on oil for each year are: 1998 (#4) 681 hours; 1997 (#2) 399 hours; 1996 (#1) 611 hours; 1995 (#1) 539 hours; and, 1994 (#2) 270 hours. All electric generating units, not only within FPC's system, but state-wide, operated at record levels during the summer of 1998. The owner or operator will be conducting VE compliance tests while firing fuel oil for each combustion turbine upon that combustion turbine exceeding 400 hours of operation on fuel oil in any federal fiscal year (October 1 through September 30). Regardless of the number of hours of operation on fuel oil, at least one VE

compliance test will be conducted on all four combustion turbines every five (5) years, coinciding with the term of the operation permit for these combustion turbines.

The relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled. Because these emissions units have no add-on control devices, they are not subject to CAM.

The generators may be relocated to any of the following facilities:

- 1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
- 2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
- 3. Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
- 4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
- 5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
- 6. Hines Energy Complex, County Road 555, 1 mi. southwest of Homeland, Polk County.
- 7. Anclote Power Plant, 1729 Baileys Road, Holiday, Pasco County

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

Based on the Title V permit renewal application received February 24, 2004, this facility is not a major source of hazardous air pollutants (HAPs).

Progress Energy Florida, Inc. **Bayboro Power Plant**Facility ID No.: 1030013

Pinellas County

Title V Air Operation Permit Renewal PROPOSED Permit No. 1030013-002-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:
Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-1352

Telephone: 813/744-6100 Fax: 813/744-6084



## Department of Environmental Protection

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

Colleen M. Castille Secretary

Permittee:

Progress Energy Florida, Inc.

P.O. Box 14042

St. Petersburg, Florida 33733

PROPOSED Permit No. 1030013-002-AV

Facility ID No.: 1030013

SIC Nos.: 49, 4911

**Project:** Title V Air Operation Permit Renewal

This permit renewal is for the operation of the Bayboro Power Plant. This facility is located at 13<sup>th</sup> Avenue and 2<sup>nd</sup> Street South, St. Petersburg, Pinellas County; UTM Coordinates: Zone 17, 338.8 km East and 3071.3 km North; Latitude: 27° 45' 28" North and Longitude: 82° 38' 13" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. 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 I-1, List of Insignificant Emissions Units and/or Activities Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix- Bayboro Combustion Turbine Fuel Heat Input vs. Temperature APPENDIX TV-4, TITLE V CONDITIONS (version dated 2/12/02)

Effective Date: August 27, 2004

Renewal Application Due Date: February 26, 2009

Expiration Date: August 26, 2009

Michael G. Cooke, Director Division of Air Resource Management

MGC/sa

## Title V Air Operation Permit Renewal PROPOSED Permit No. 1030013-002-AV

#### **Table of Contents**

| Section  | Page Number |
|--|-------------|
| Placard Page   | 1           |
| I. Facility Information  A. Facility Description.  B. Summary of Emissions Unit ID No(s). and Brief Description(s).  C. Relevant Documents.                | 2 - 3       |
| II. Facility-wide Conditions   | 4 - 6       |
| III. Emissions Unit(s) and Conditions  A001 Bayboro Peaking Unit #1002 Bayboro Peaking Unit #2  -003 Bayboro Peaking Unit #3  -004 Bayboro Peaking Unit #4 | 7 - 13      |
| B. Relocatable Diesel Generators   | 14 - 20     |

#### PROPOSED Permit No.: 1030013-002-AV

#### Section I. Facility Information.

#### Subsection A. Facility Description.

These facility's emissions units are No. 2 fuel oil fired combustion turbines manufactured by Pratt & Whitney (model number FT4C-1LF) and are designated as Bayboro Peaking Units #1, #2, #3 and #4. Each combustion turbine has two (2) turbine engines with each engine having its own stack. The manufacturers fuel flow and heat input ratings at 30°F for each turbine is 5,609 gallons per hour of No. 2 fuel oil (corresponds to approximately 774 million Btu per hour). The actual heat input rate of the turbine is a function of the ambient temperature. These combustion turbines are used as peaking units to run a nominal 56.7 MW generator (each). Emissions from the combustion turbines are uncontrolled. In addition, the facility may have relocatable diesel generator(s). The generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled. Because these emissions units have no add-on control devices, they are not subject to CAM.

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

Based on the Title V permit renewal application received on February 24, 2004, this facility is not a major source of hazardous air pollutants (HAPs).

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

| Facility ID<br>No. | <u>E. U.</u><br><u>ID No.</u> | Brief Description  |
|--------------------|-------------------------------|--|
| 1030013            | -001<br>-002<br>-003<br>-004  | Bayboro Peaking Unit #1 Gas Turbine<br>Bayboro Peaking Unit #2 Gas Turbine<br>Bayboro Peaking Unit #3 Gas Turbine<br>Bayboro Peaking Unit #4 Gas Turbine   |
| 7775047            | -001                          | Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled. |

PROPOSED Permit No.: 1030013-002-AV

#### Unregulated Emissions Units and/or Activities

| -005 | Internal floating roof fuel oil tank - 1,088,304 gallons    |
|------|---|
| -006 | Internal floating roof fuel oil tank - 786,232 gallons      |
| -007 | Waste oil tank - 12,000 gallons                             |
| -008 | Lube oil storage tank - 500 gallons                         |
| -009 | Fuel filter building vents                                  |
| -010 | Overboard tanks for the peaking unit turbines               |
| -011 | Lube oil vents with demisters for the peaking unit turbines |

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:

FINAL Title V Permit issued with effective date August 26, 1999.

Title V Permit Renewal Application received on February 24, 2004.

Draft Title V Permit Renewal clerked on May 20, 2004.

PROPOSED Permit No.: 1030013-002-AV

#### 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.; and, Pinellas County Ordinance 97-05, Section 33, Sec. 58-178]
- 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 Post Office 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. <u>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of 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.]

PROPOSED Permit No.: 1030013-002-AV

7. 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]

{Permitting note: There are no requirements deemed necessary and ordered by the Department, at this time.}

8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: maintenance of paved areas as needed, regular grass mowing and care of vegetation, and limiting access to plant property by unnecessary vehicles. [Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in the initial Title V permit application received June 14, 1996.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (condition 58. of APPENDIX TV-4, TITLE V CONDITIONS.)"

- 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. The permittee shall submit all compliance related notifications and reports required of this permit to the Pinellas County Department of Environmental Management (PCDEM) office:

Pinellas County Department of Environmental Management Air Quality Division 300 South Garden Avenue

Clearwater, Florida 34616 Telephone: 813/464-4422 Fax: 813/464-4420

11. 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 and EPRCA Enforcement Branch Air Enforcement Section 61 Forsyth Street Atlanta, Georgia 30303 Telephone: 404/562-9155

Fax: 404/562-9163

12. 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.]

PROPOSED Permit No.: 1030013-002-AV

13. 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.]

PROPOSED Permit No.: 1030013-002-AV

Section III. Emissions Unit(s) and Conditions.

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

| <u>E.U.</u> |                          |
|-------------|--------------------------|
| ID No.      | <b>Brief Description</b> |
| -001        | Bayboro Peaking Unit #1  |
| -002        | Bayboro Peaking Unit #2  |
| -003        | Bayboro Peaking Unit #3  |
| -004        | Bayboro Peaking Unit #4  |

These emissions units are No. 2 fuel oil fired combustion turbines manufactured by Pratt & Whitney (model number FT4C-1LF) and are designated as Bayboro Peaking Units #1, #2, #3 and #4. Each combustion turbine has two (2) turbine engines with each engine having its own stack. The manufacturers fuel flow and heat input ratings at 30°F for each turbine is 5,609 gallons per hour of No. 2 fuel oil (corresponds to approximately 774 million Btu per hour). The actual heat input rate of the turbine is a function of the ambient temperature. These combustion turbines are used as peaking units to run a nominal 56.7 MW generator (each). Emissions from the combustion turbines are uncontrolled, and therefore, are not subject to CAM.

{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. Each combustion turbine engine has its own stack. Each combustion turbine began commercial operation in 1973.}

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

#### **Essential Potential to Emit (PTE) Parameters**

- **A.1.** Permitted Capacity. The maximum capacity for each gas turbine is as follows:
- (a) 774.0 million Btu per hour at 30° F.
- (b) The peak capacity shall be determined from the graph of Fuel Heat Input verses Ambient Temperature shown on "Appendix Bayboro Combustion Turbine". [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. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever

PROPOSED Permit No.: 1030013-002-AV

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 the 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.}

- **A.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.14.** [Rule 62-297.310(2), F.A.C.]
- A.3. <u>Methods of Operation Fuels</u>. Only new No. 2 fuel oil shall be fired in the combustion turbines. New No. 2 fuel oil is defined as fuel oil that has been refined from crude oil and has not been used and which may or may not contain additives. [Rule 62-213.410(1), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-
- **A.4.** Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

#### **Emission Limitations and Standards**

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

{Permitting note: Unless otherwise specified, the averaging times for Specific Condition A.5. is based on the specified averaging time of the applicable test method.}

**A.5.** <u>Visible Emissions</u>. 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, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**A.6.** Not federally enforceable. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight.

[AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

#### **Excess Emissions**

253213A]

A.7. Excess emissions from these emissions units resulting from startup, shutdown or 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 PCDEM for longer duration.

[Rule 62-210.700(1), F.A.C.]

PROPOSED Permit No.: 1030013-002-AV

**A.8.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

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

#### **Monitoring of Operations**

**A.9.** Not federally enforceable. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor, or the permittee, upon each fuel delivery. See specific condition **A.13**.

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

**A.10.** Not federally enforceable. In order to provide reasonable assurance that the fuel oil supplier's fuel oil analysis is accurate, the permittee shall perform at least one audit sample analysis from a fuel oil delivery during each calendar year period. The fuel oil shall be analyzed for the following:

Btu content API gravity Density Sulfur content, percent by weight

An audit sample analysis is not required in any calendar year for which the permittee provided fuel analysis to demonstrate compliance with the fuel oil sulfur limitation. See specific condition **A.9.** [Rules 62-4.070(3) and 62-213.440, F.A.C.]

#### **A.11.** 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: 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.}

PROPOSED Permit No.: 1030013-002-AV

- **A.12.** 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.]
- **A.13.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or latest edition. [Rules 62-213.440 and 62-297.440, F.A.C.]
- **A.14.** Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the peak heat input rate based on the average ambient temperature during the test. The peak heat input rate is defined by a graph of Fuel Heat Input verses Ambient Temperature for each gas turbine. 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. 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.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

#### A.15. 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.]

PROPOSED Permit No.: 1030013-002-AV

**A.16.** 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;
  - 9. The owner or operator shall notify the PCDEM in writing, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the PCDEM, 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 PCDEM.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

- **A.17.** <u>Visible Emissions Testing Annual</u>. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
  - a. only liquid fuels for less than 400 hours per year.

See specific condition A.18.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

PROPOSED Permit No.: 1030013-002-AV

**A.18.** Visible Emissions Testing - Waiver. In order to request the annual visible emissions test waiver, a letter shall be sent each year, when the visible emissions test is due, to the Air Compliance Section, Southwest District Office of the Department of Environmental Protection, and to the PCDEM, Air Quality Division, stating the number of hours that fuel oil was utilized, and that the requirements for approval of the waiver have been satisfied. Regardless of fuel usage, a waiver will not be granted for the visible emissions test for the 12 month period prior to permit renewal. A visible emissions test is required and shall be conducted during the 12 month period prior to permit renewal. [Rule 62-4.070(3), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

#### Recordkeeping and Reporting Requirements

**A.19.** Monthly Recordkeeping. Progress Energy Florida, Inc. shall maintain a monthly record of the hours of operation of the peaking units. This record shall be updated monthly and shall be completed by the end of the following month. The records shall be maintained at the facility for a minimum of the most recent five year period and shall be made available to the Department and PCDEM, Air Quality Division, upon request.

[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**A.20.** <u>Malfunction Reporting</u>. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the PCDEM 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.21. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with PCDEM on the results of each such test.
- (b) The required test report shall be filed with PCDEM as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) Each test report shall include:
  - (1) A statement of the maximum turbine performance based on the turbine performance criteria defined by specific condition A.1.
  - (2) A copy of the graph of Fuel Heat Input verses Ambient Temperature for each peaking unit noting the maximum heat input and the ambient temperature during the compliance test; and
  - (3) A copy of the fuel oil analysis.

[Rule 62-297.310(8), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

PROPOSED Permit No.: 1030013-002-AV

A.22. Not federally enforceable. Operating Reports. Submit to the Southwest District office, Air Compliance Section of the Department of Environmental Protection, and the PCDEM, Air Quality Division, each calendar year, on or before March 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, for the preceding calendar year.

The annual operating report shall be based on the following:

- (a) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking units, shall be based on a weighted 12-month average (calendar year) and be calculated from the fuel delivery receipts and the vendors fuel oil analysis.
- (b) The permittee will submit the Annual Operating Report, as required by Rule 62-210.370(3), F.A.C., using the most current submittal process and format provided by the Department. The most current emission factors (e.g. the latest edition of EPA AP-42) shall be used in the calculation of annual emissions of Total Particulate Matter (PM), Filterable PM, Carbon Monoxide, Sulfur Dioxide, Nitrogen Oxides and Volatile Organic Compounds

[Rule 62-210.370(3), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

PROPOSED Permit No.: 1030013-002-AV

#### Section III. Emissions Unit(s) and Conditions.

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

Facility

E. U. ID

No.

No.

Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts.

Emissions from the generator(s) are uncontrolled, and therefore, are not subject to CAM.

The generators may be relocated to any of the following facilities:

- 1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
- 2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
- 3. Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
- 4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
- 5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
- 6. Hines Energy Complex, County Road 555, 1 mi. southwest of Homeland, Polk County.
- 7. Anclote Power Plant, 1729 Baileys Road, Holiday, Pasco County

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack. This section of the permit is only applicable when the generator(s) is(are) located at the Bayboro Power Plant.}

#### The following specific conditions apply to the emissions units listed above regardless of location:

#### Essential Potential to Emit (PTE) Parameters

**B.1.** Permitted Capacity. The maximum (combined) heat input rate shall not exceed 25.74 million Btu per hour.

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

- **B.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.12**. [Rule 62-297.310(2), F.A.C.]
- **B.3.** Methods of Operation Fuels. Only new No. 2 fuel oil with a maximum sulfur content of 0.5% by weight shall be fired in the diesel generator(s). [Rule 62-213.410, F.A.C. and, AC 09-202080.]

PROPOSED Permit No.: 1030013-002-AV

**B.4.** Hours of Operation. The hours of operation expressed as "engine-hours" shall not exceed 2970 hours in any consecutive 12 month period. The total hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each generator. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC 09-202080.]

#### **Emission Limitations and Standards**

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

{Permitting note: Unless otherwise specified, the averaging times for Specific Condition **B.5.** is based on the specified averaging time of the applicable test method.}

**B.5.** <u>Visible Emissions</u>. Visible emissions from each generator shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AC 09-202080.]

#### **Excess Emissions**

- **B.6.** Excess emissions from these emissions units resulting from startup, shutdown or 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.7.** 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.8.** Fuel Sulfur Analysis. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. See specific condition **B.3.** and **B.11.** [Rule 62-213.440, F.A.C.]

### **B.9.** 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.

PROPOSED Permit No.: 1030013-002-AV

(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: 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.10.** The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]
- **B.11.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s). [Rules 62-213.440 and 62-297.440, F.A.C.]
- **B.12.** Operating Rate During Testing. Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate for each generator. 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 operations may be 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. Failure to submit the actual operating rate may invalidate the test. [Rules 62-297.310(2), F.A.C.; and, AC 09-202080.]

PROPOSED Permit No.: 1030013-002-AV

#### **B.13.** 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.14.** 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;
  - 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. For each generator located in Pinellas County, FPC shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management.

PROPOSED Permit No.: 1030013-002-AV

- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; and, AO 09-205952.]

**B.15.** <u>Visible Emissions Testing - Annual</u>. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

**B.16.** After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content. See specific conditions **B.3.**, **B.5.**, and **B.8.** [Rules 62-4.070(3) and 62-297.310(7)(b),F.A.C.; and, AO 09-205952.]

#### Recordkeeping and Reporting Requirements

**B.17.** Malfunction Reporting. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify PCDEM, if a generator is located in Pinellas County, 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 PCDEM.

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

PROPOSED Permit No.: 1030013-002-AV

#### B.18. Test Reports.

- (a) Each generator shall be tested on an annual basis within 30 days of the date October 25.
- (b) 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.
- (c) The required test report shall be filed with the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management, if a generator is located in Pinellas County, as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (d) The test reports for a unit that has been relocated shall be submitted to the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management, if a generator is located in Pinellas County, within 45 days of testing. [Rule 62-297.310(8), F.A.C.; and, AO 09-25952.]
- **B.19.** To demonstrate compliance with specific condition **B.4.**, records shall indicate the daily hours of operation for each of the generators, the daily hours of operation expressed as "engine-hours" and the cumulative total hours of operation expressed as "engine-hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management upon request. [Rules 62-213.440 and 62-297.310(8), F.A.C.; and, AO 09-205952.]
- **B.20.** To demonstrate compliance with specific condition **B.3.**, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management upon request.

[Rule 62-297.310(8), F.A.C.; and, AC 09-202080.]

#### **Source Obligation**

**B.21.** Specific conditions in construction permit AC 09-202080, limiting the "engine hours", were accepted by the applicant to escape Prevention of Significant Deterioration review. If Progress Energy Florida, Inc. requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(5), F.A.C., as though construction had not yet begun.

[Rule 62-212.400(2)(g), F.A.C.; and, AC 09-202080.]

PROPOSED Permit No.: 1030013-002-AV

**B.22.** Progress Energy Florida, Inc. shall notify the Department's Southwest District Office, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following;

- a. which generator, by serial number, is being relocated,
- b. which location the generator is being relocated from and which location it is being relocated to, and
- c. the approximate startup date at the new location.

If a diesel generator is to be relocated within Pinellas County, then Progress Energy Florida, Inc. shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management.

[Rule 62-4.070(3), F.A.C.; and, AC 09-202080]

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

Progress Energy Florida, Inc. **PROPOSED Permit No.:** 1030013-002-AV

Bayboro Power Plant Facility ID No.: 1030013

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

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

| E.U. ID<br>No. | Brief Description of Emissions Units and/or Activity        |
|----------------|---|
| -005           | Internal floating roof fuel oil tank - 1,088,304 gallons    |
| -006           | Internal floating roof fuel oil tank - 786,232 gallons      |
| -007           | Waste oil tank - 12,000 gallons                             |
| -008           | Lube oil storage tank - 500 gallons                         |
| -009           | Fuel filter building vents                                  |
| -010           | Overboard tanks for the peaking unit turbines               |
| -011           | Lube oil vents with demisters for the peaking unit turbines |

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

Progress Energy Florida, Inc. **PROPOSED Permit No.:** 1030013-002-AV

Bayboro Power Plant Facility ID No.: 1030013

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

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

#### Brief Description of Emissions Units and/or Activities

- 1. Maintenance shop/Jet repair shop sand blaster, drill press and lathes
- 2. Maintenance shop/Jet repair shop solvent/paint/lube oil cabinets
- 3. Maintenance shop/Jet repair shop mineral spirit parts washer
- 4. Maintenance shop/Jet repair shop gas cylinders
- 5. Waste solvent storage area 55 gallon drums waste oil, mineral spirits, lube oil, cleaners
- 6. Substation transformers and associated equipment
- 7. Oil Storage Area truck unloading area
- 8. Pump house with fire system
- 9. Barge Delivery moorings and fuel handling equipment peak: 2 barges/week
- 10. Eight underground waste oil tanks 168 gallons/each
- 11. One emergency diesel generator, maximum fuel firing rate of 25 gal/hr, not to exceed 10,000 gal/yr

#### Appendix H-1, Permit History/ID Number Changes

Progress Energy Florida, Inc.

PROPOSED Permit No.: 1030013-002-AV

Bayboro Power Plant

Facility ID No.: 1030013

#### Permit History (for tracking purposes):

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| ID No | <u>Description</u>              | Permit No.  | Issue Date | Expiration Date | Extended Date <sup>1,2</sup> | Revised Date(s) |
|-------|---------------------------------|-------------|------------|-----------------|------------------------------|-----------------|
| -001  | Gas Turbine Peaking Unit #1     | AO52-253207 | 11/23/94   | 11/01/99        |                              | 06/19/95        |
| -002  | Gas Turbine Peaking Unit #2     | AO52-253209 | 11/23/94   | 11/01/99        |                              | 06/19/95        |
| -003  | Gas Turbine Peaking Unit #3     | AO52-253211 | 11/23/94   | 11/01/99        |                              | 06/19/95        |
| -004  | Gas Turbine Peaking Unit #4     | AO52-253213 | 11/23/94   | 11/01/99        |                              | 06/19/95        |
| -XXX  | Relocatable Diesel Generator(s) | AO09-205952 |            | 03/31/97        |                              |                 |
|       |                                 |             |            |                 |                              |                 |

#### (if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 40PNL520013

To: Facility ID No.: 1030013

#### Notes:

{Rule 62-213.420(1)(b)2., F.A.C., allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}

<sup>1 -</sup> AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

<sup>2 -</sup> AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

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

Progress Energy Florida, Inc. Bayboro Power Plant PROPOSED Permit No.: 1030013-002-AV

Facility ID No.: 1030013

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. | Brief Description           |  |
|-------------|-----------------------------|--|
| [-001]      | Gas Turbine Peaking Unit #1 |  |
| [-002]      | Gas Turbine Peaking Unit #2 |  |
| [-003]      | Gas Turbine Peaking Unit #3 |  |
| [-004]      | Gas Turbine Peaking Unit #4 |  |

|                 |         |            | Allowable Emissions   |           |     | Equivalent Emi | ssions N                  |   |                         |
|-----------------|---------|------------|-----------------------|-----------|-----|----------------|---------------------------|---|-------------------------|
| Pollutant Name  | Fuel(s) | Hours/Year | Standard(s)           | lbs./hour | TPY | 海滨lbs:/hour    | 與問題於TRY                   | Regulatory Citation(s)                      | See permit condition(s) |
| SO <sub>2</sub> | Liquid  | 8,760      | 0.5% by weight sulfur |           |     | 390.9          | ATT WATER BUT TO BE TO BE | AO52-253207A, 253209A,<br>253211A & 253213A | A.6.                    |
| VE              | Ali     | 8,760      | 20% opacity           |           |     |                |                           | Rule 62-296.320(4)(b)1.                     | A.5.                    |

Notes

<sup>\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

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

Progress Energy Florida, Inc. Bayboro Power Plant

PROPOSED Permit No.: 1030013-002-AV

Facility ID No.: 1030013

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.

**Brief Description** 

[-xxx]

Relocatable Diesel Fired Generator(s)

|                 |         |            | Allowable Emissions   |           | Equivalent Er  | nissions at the |                                 |                         |
|-----------------|---------|------------|-----------------------|-----------|----------------|-----------------|---------------------------------|-------------------------|
| Pollutant Name  | Fuel(s) | Hours/Year | Standard(s)           | lbs./hour | TPY 滤線網bs:/hou | ir weeks to TPY | Regulatory Citation(s)          | See permit condition(s) |
| SO <sub>2</sub> | Liquid  | 2,970      | 0.5% by weight Sulfur |           | 14:16          | 21.02           | Applicant request & AC09-202080 | B.3. & B.4.             |
| VE              | All     | l          | 20% opacity           |           |                |                 | Applicant request & AO09-205952 | B.5.                    |

Notes:

<sup>\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

### Table 2-1, Summary of Compliance Requirements

Progress Energy Florida, Inc. Bayboro Power Plant

PROPOSED Permit No.: 1030013-002-AV

Facility ID No.: 1030013

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. | Brief Description           |  |  |  |  |
|-------------|-----------------------------|--|--|--|--|
| [-001]      | Gas Turbine Peaking Unit #1 |  |  |  |  |
| [-002]      | Gas Turbine Peaking Unit #2 |  |  |  |  |
| [-003]      | Gas Turbine Peaking Unit #3 |  |  |  |  |
| [-004]      | Gas Turbine Peaking Unit #4 |  |  |  |  |

|                 | _       |              | Testing       | Frequency | Min. Compliance |       | •                       |
|-----------------|---------|--------------|---------------|-----------|-----------------|-------|-------------------------|
| Pollutant Name  |         | Compliance   | Time          | Base      | Test            |       |                         |
| or Parameter    | Fuel(s) | Method       | Frequency     | Date *    | Duration        | CMS** | See permit condition(s) |
| VE              | All     | EPA Method 9 | Annual        | .1-Feb    | 30 min          |       | A.12. & A.17.           |
| SO <sub>2</sub> | Liquid  | ASTM Methods | each delivery |           |                 |       | A.13.                   |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 | ]     |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               | 1         |                 | ١.    |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 | •       |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |
|                 |         |              |               |           |                 |       |                         |

#### Notes:

<sup>\*</sup> The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>\*\*</sup>CMS [=] continuous monitoring system

#### **Table 2-1, Summary of Compliance Requirements**

Progress Energy Florida, Inc. Bayboro Power Plant PROPOSED Permit No.: 1030013-002-AV

Facility ID No.: 1030013

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.

**Brief Description** 

[-xxx]

Relocatable Diesel Fired Generator(s)

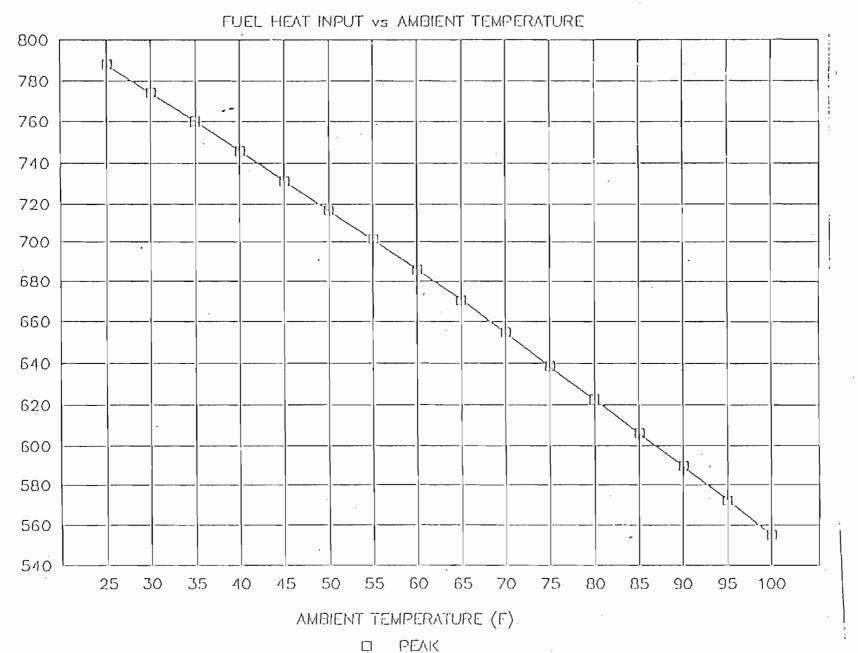
|                 |         |              | Testing       | Frequency            | Min. Compliance |       |                         |
|-----------------|---------|--------------|---------------|----------------------|-----------------|-------|-------------------------|
| Pollutant Name  |         | Compliance   | Time          | Base                 | Test            |       |                         |
| or Parameter    | Fuel(s) | Method       | Frequency     | Date *               | Duration        | CMS** | See permit condition(s) |
| VE              |         | EPA Method 9 | Annual        | 30 days from startup | 30 min          |       | B.10.                   |
| SO <sub>2</sub> | Liquid  | ASTM Methods | each delivery |                      |                 |       | B.11.                   |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               | ,                    |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              | [             |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |
|                 |         |              |               |                      |                 |       |                         |

Notes:

<sup>\*</sup> The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>\*\*</sup>CMS [=] continuous monitoring system

## BAYBORO COMBUSTION TURBINE



BAYBORO COMBUSTION TURBINE

## Memorandum

## Florida Department of Environmental Protection

TO:

Trina L. Vielhauer

THRU:

Al Linero

FROM:

Syed Arif Syad And

DATE:

July 7, 2004

SUBJECT:

PROPOSED Permit Project No.: 1030013-002-AV

Progress Energy Florida, Inc.

Four 56.7 MW Combustion Turbines and Seven Relocatable Diesel Fired

Generators

**Bayboro Power Station** 

Pinellas County

Attached is the proposed permit package for the Title V Permit Renewal for this facility. The Statement of Basis shows the applicant's did not request any changes from the initial Title V permit. The Public Notice was published on May 23, 2004 in the St. Petersburg Times. Comments were submitted by the applicant.

We recommend your approval of the attached proposed Title V Permit Renewal.

AAL/sa

Attachments