



Environmental Consulting & Technology, Inc.

May 16, 2012
ECT No. 110664-0100

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MAY 17 2012

DIVISION OF AIR
RESOURCE MANAGEMENT

Mr. Jeff Koerner
Administrator, Office of Permitting and Compliance
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Re: Progress Energy Florida (PEF)
Higgins Power Plant
Title V Air Operation Permit Renewal Application
Permit No. 1030012-006-AV

Project No: 1030012-006-AV

Dear Mr. Koerner:

On behalf of Florida Power Corporation d/b/a Progress Energy Florida (PEF), two copies of an application package to renew the PEF Higgins Power Plant Title V Air Operation Permit No. 1030012-006-AV are enclosed for Florida Department of Environmental Protection (FDEP) review. Pursuant to the requirements of Chapter 62-213.400, Florida Administrative Code (F.A.C.), the application package contains FDEP's Application for Air Permit - Long Form, and the required supplemental facility and emissions unit information.

Please contact Chris Bradley at (727) 820-5962 or e-mail at Chris.Bradley@pgnmail.com if there are any questions regarding this application.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Thomas W. Davis, P.E.
Principal Engineer

TWD/dlm

cc: Robert Wong (w/enc)
FDEP Southwest District

Peter A. Hessling (w/enc)
Pinellas County Department of Environmental Management
Air Quality Division

Enclosures

Y:\GDP-12\PRJ\TWD0516.DOCX.1

3701 Northwest
98th Street
Gainesville, FL
32606

(352)
332-0444

FAX (352)
332-6722

**HIGGINS POWER PLANT
TITLE V OPERATION PERMIT
RENEWAL APPLICATION**

Prepared for:



Progress Energy

**People. Performance. Excellence.
St. Petersburg, Florida**

Prepared by:

ECT

Environmental Consulting & Technology, Inc.

***3701 Northwest 98th Street
Gainesville, Florida 32606***

ECT No. 110664-0100

May 2012

INTRODUCTION

The Florida Power Corporation (d/b/a Progress Energy Florida, Inc. [PEF]) Higgins Power Plant is located at 998 East Shore Drive in Oldsmar, Pinellas County, Florida. The Higgins Power Plant 160-megawatt (MW) electrical generation facility is comprised of four simple-cycle aeroderivative combustion turbine peaking (CTP) units identified as follows:

- CTP Unit 1; Emissions Unit (EU) 004.
- CTP Unit 2; EU 005.
- CTP Unit 3; EU 006.
- CTP Unit 4; EU 007.

Each CTP unit consists of two Pratt & Whitney simple-cycle combustion turbines (SCCTs), one common generator, and one common stack; i.e., the Higgins Power Plant electric generation equipment consists of eight SCCTS, four generators, and four stacks. The SCCTs are fired with pipeline-quality natural gas containing no more than 1.0 grain of sulfur per one hundred standard cubic feet (gr S/100 scf) , or with No. 2 distillate fuel oil containing no more than 0.5 weight percent sulfur. The SCCTs commenced initial operation in the 1969 to 1971 timeframe and therefore are only subject to applicable Florida State Implementation Plan (SIP) emissions standards.

The Higgins Power Plant also includes a No. 2 fuel oil storage tank, ancillary support equipment, as well as a variety of insignificant emissions units and activities.

Three fossil fuel-fired steam generators previously in use at the Higgins Power Plant permanently ceased operation on October 20, 2006. In accordance with the provisions of Chapter 40, Part 72.8(d), Code of Federal Regulations (CFR), these emissions units are exempt from the requirements of the Acid Rain Program (ARP) to obtain an ARP Phase II permit and to monitor emissions. The emissions units are also exempt from the requirements of the Clean Air Interstate Rule (CAIR) 40 CFR 96 emissions trading programs. The three fossil fuel-fired steam generators were permanently retired on January 1, 2007.

Operation of the Higgins Power Plant is currently authorized by Florida Department of Environmental Protection (FDEP) Title V Permit No. 1030012-006-AV issued with an effective date of January 1, 2008, and an expiration date of December 31, 2012.

The FDEP Title V regulations are codified in Chapter 62-213, Florida Administrative Code (F.A.C.), Operation Permits for Major Sources of Air Pollution. With respect to Title V air operation permit renewal deadlines, Rule 62-213.420(1)(a)2., F.A.C., requires the permittee apply for a permit renewal at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the Higgins Power Plant, which has a Title V air operation permit expiration date of December 31, 2012, this regulatory deadline results in the requirement to submit a Title V air operation permit renewal application no later than May 20, 2012.

This application package, consisting of FDEP's Application for Air Permit – Long Form, Effective March 11, 2010, and all required supplemental facility and emissions unit information, constitutes PEF's Title V permit renewal application for the Higgins Power Plant and is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C.

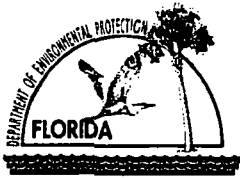
The following attachments are included as referenced in the permit application:

- Attachment A—Facility Location Map.
- Attachment B-1, B-2—Facility Plot Plans.
- Attachment C—Process Flow Diagram.
- Attachment D—Precautions to Prevent Emissions of Unconfined Particulate Matter.
- Attachment E—List of Insignificant Activities.
- Attachment F—Identification of Applicable Requirements.
- Attachment G—Compliance Report.
- Attachment H—Requested Changes to Current Title V Air Operation Permit.
- Attachment I—Acid Rain and CAIR Retired Unit Exemption.
- Attachment J—Clean Air Interstate Rule Part.
- Attachment K—Fuel Analyses or Specifications.
- Attachment L—Procedures for Startup and Shutdown.

**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

APPLICATION FOR AIR PERMIT – LONG FORM





Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

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MAY 17 2012

DIVISION OF AIR RESOURCE MANAGEMENT

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

| | |
|--|--|
| 1. Facility Owner/Company Name: Florida Power Corporation dba Progress Energy Florida, Inc. | |
| 2. Site Name: Higgins Power Plant | |
| 3. Facility Identification Number: 1030012 | |
| 4. Facility Location: Street Address or Other Locator: 998 East Shore Drive City: Oldsmar County: Pinellas Zip Code: 34677 | |
| 5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Application Contact

| | |
|--|--|
| 1. Application Contact Name: Chris Bradley Senior Environmental Specialist | |
| 2. Application Contact Mailing Address Organization/Firm: Florida Power Corporation dba Progress Energy Florida, Inc. Street Address: 299 First Avenue North, PEF-903 City: St. Petersburg State: Florida Zip Code: 33701-3308 | |
| 3. Application Contact Telephone Numbers... Telephone: (727) 820-5962 ext. Fax: (727) 820-5229 | |
| 4. Application Contact Email Address: Chris.Bradley@pgnmail.com | |

Application Processing Information (DEP Use)

| | |
|---|-----------------------------------|
| 1. Date of Receipt of Application: 5-17-12 | 3. PSD Number (if applicable): |
| 2. Project Number(s): 1030012-007-AV | 4. Siting Number (if applicable): |

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Operation of the Progress Energy Florida, Inc. (PEF) Higgins Power Plant is currently authorized by Title V Air Operation Permit Number 1030012-006-AV. This permit was issued with an effective date of January 1, 2008 and an expiration date of December 31, 2012.

In accordance with Rule 62-213.420(1)(a)2., F.A.C., an application for a Title V permit renewal must be submitted at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the Higgins Power Plant, this regulatory deadline requires the submittal of a Title V permit renewal application no later than May 20, 2012. This application and supporting documents constitutes PEF's request for renewal of Higgins Power Plant Title V Air Operation Permit Number 1030012-006-AV.

APPLICATION INFORMATION

Owner/Authorized Representative Statement NOT APPLICABLE

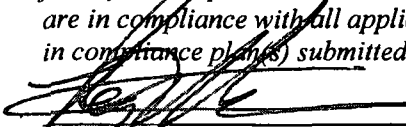
Complete if applying for an air construction permit or an initial FESOP.

| |
|--|
| 1. Owner/Authorized Representative Name : |
| 2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code: |
| 3. Owner/Authorized Representative Telephone Numbers... Telephone: () - ext. Fax: () |
| 4. Owner/Authorized Representative E-mail Address: |
| 5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i> _____ Signature _____ Date |

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

| |
|---|
| 1. Application Responsible Official Name: Reginald D. Anderson, Plant Manager |
| 2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source. |
| 3. Application Responsible Official Mailing Address... Organization/Firm: Florida Power Corporation d/b/a Progress Energy Florida, Inc. Street Address: 299 First Avenue North (BR44) City: St. Petersburg State: Florida Zip Code: 33701 |
| 4. Application Responsible Official Telephone Numbers... Telephone: (727) 827-6161 ext. Fax: (727) 827-6298 |
| 5. Application Responsible Official E-mail Address: Reginald.Anderson @pgnmail.com |
| 6. Application Responsible Official Certification: <p><i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plans submitted with this application.</i></p> <p> Signature</p> <p><u>5/11/12</u> Date</p> |

APPLICATION INFORMATION

Professional Engineer Certification

| |
|---|
| 1. Professional Engineer Name: Thomas W. Davis Registration Number: 36777 |
| 2. Professional Engineer Mailing Address... Organization/Firm: Environmental Consulting & Technology, Inc. Street Address: 3701 Northwest 98th Street City: Gainesville State: Florida Zip Code: 32606-5004 |
| 3. Professional Engineer Telephone Numbers... Telephone: (352) 248 - 3351 ext. Fax: (352) 332 - 6722 |
| 4. Professional Engineer Email Address: tdavis@ectinc.com |
| 5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <p>(1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i></p> <p>(2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i></p> <p>(3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i></p> <p>(4) <i>If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i></p> <p>(5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i></p> <p>Signature: <u>Thomas W. Davis</u> No 36777 Date: <u>5/16/12</u></p> <p>(seal) STATE OF FLORIDA PROFESSIONAL ENGINEER</p> |

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

| | | | |
|--------------------------------|---------------------------|--------------------------------------|---------------------------------------|
| 1. Facility UTM Coordinates... | | 2. Facility Latitude/Longitude... | |
| Zone 17 | East (km) 336.5 | Latitude (DD/MM/SS) 28°00'11" | Longitude (DD/MM/SS) 82°39'41" |
| (NAD 83) | North (km) 3,098.4 | | |
| 3. Governmental Facility Code: | 4. Facility Status Code: | 5. Facility Major Group SIC Code: | 6. Facility SIC(s): |
| 0 | A | 49 | 4911 |
| 7. Facility Comment : | | | |

Facility Contact

| |
|--|
| 1. Facility Contact Name: Gus Schaefer, Sr. Environmental Specialist |
| 2. Facility Contact Mailing Address... Organization/Firm: Florida Power Corporation d/b/a Progress Energy Florida, Inc. Street Address: 299 First Avenue North (PEF 903) City: St. Petersburg State: Florida Zip Code: 33701 |
| 3. Facility Contact Telephone Numbers: Telephone: (727) 827-6161 ext. Fax: (727) 827-6298 |
| 4. Facility Contact Email Address: Gustave.Schaefer@pgnmail.com |

Facility Primary Responsible Official **NOT APPLICABLE**

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

| |
|--|
| 1. Facility Primary Responsible Official Name: |
| 2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code: |
| 3. Facility Primary Responsible Official Telephone Numbers... Telephone: () - ext. Fax: () - |
| 4. Facility Primary Responsible Official E-mail Address: |

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

| | |
|---|----------------------------------|
| 1. <input type="checkbox"/> Small Business Stationary Source | <input type="checkbox"/> Unknown |
| 2. <input type="checkbox"/> Synthetic Non-Title V Source | |
| 3. <input checked="" type="checkbox"/> Title V Source | |
| 4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs) | |
| 5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs | |
| 6. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs) | |
| 7. <input type="checkbox"/> Synthetic Minor Source of HAPs | |
| 8. <input type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR 60) | |
| 9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR 60) | |
| 10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR 61 or Part 63) | |
| 11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5)) | |
| 12. Facility Regulatory Classifications Comment: | |

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

| | |
|----|---|
| 1. | Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attach. B <input type="checkbox"/> Previously Submitted, Date: _____ |
| 2. | Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attach. C <input type="checkbox"/> Previously Submitted, Date: _____ |
| 3. | Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attach. D <input type="checkbox"/> Previously Submitted, Date: _____ |

Additional Requirements for Air Construction Permit Applications NOT APPLICABLE

| | |
|-----|---|
| 1. | Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (existing permitted facility) |
| 2. | Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: _____ |
| 3. | Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____ |
| 4. | List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
| 5. | Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 6. | Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 7. | Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 8. | Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 9. | Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 10. | Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

NOT APPLICABLE

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
 Attached, Document ID: _____ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
 Attached, Document ID: Attach. E Not Applicable (revision application)
2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
 Attached, Document ID: Attach. F
 Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
 Attached, Document ID: Attach. G
Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
 Attached, Document ID: _____
 Equipment/Activities Onsite but Not Required to be Individually Listed
 Not Applicable
5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
 Attached, Document ID: _____ Not Applicable
6. Requested Changes to Current Title V Air Operation Permit:
 Attached, Document ID: Attach. H Not Applicable

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

| |
|--|
| 1. Acid Rain Program Forms: Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable (not an Acid Rain source) Phase II NO _x Averaging Plan (DEP Form No. 62-210.900(1)(a)1.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable Acid Rain and CAIR Retired Unit Exemption (DEP Form No. 62-210.900(1)(c)): <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. I</u> <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable |
| 2. CAIR Part (DEP Form No. 62-210.900(1)(b)): <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. J</u> <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable (not a CAIR source) |

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [1] of [4]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Combustion Turbine Peaking Unit No. 1 (CTP 1)

3. Emissions Unit Identification Number: **-004**

| | | | |
|--|---|--|---|
| 4. Emissions Unit Status Code: A | 5. Commence Construction Date: N/A | 6. Initial Startup Date: N/A | 7. Emissions Unit Major Group SIC Code: 49 |
|--|---|--|---|

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit:
Manufacturer: **Pratt & Whitney** Model Number: **Twin-Pac**

10. Generator Nameplate Rating: **37 MW**

11. Emissions Unit Comment:

CTP 1 consists of two Pratt & Whitney SCCTs that power a common 37 MW generator.

EMISSIONS UNIT INFORMATION

Section [1] of [4]

NOT APPLICABLE

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

EMISSIONS UNIT INFORMATION

Section [1] of [4]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

| |
|--|
| 1. Maximum Process or Throughput Rate: N/A |
| 2. Maximum Production Rate: N/A |
| 3. Maximum Heat Input Rate: 566 million Btu/hr, higher heating value (HHV) |
| 4. Maximum Incineration Rate: pounds/hr N/A tons/day |
| 5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8,760 hours/year |
| 6. Operating Capacity/Schedule Comment: Maximum heat input rate shown in Field 3 is at 59°F ambient temperature. |

EMISSIONS UNIT INFORMATION

Section [1] of [4]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

| | | | |
|---|--|---|--|
| 1. Identification of Point on Plot Plan or Flow Diagram: CTP 1 | | 2. Emission Point Type Code: 1 | |
| 3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A | | | |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A | | | |
| 5. Discharge Type Code: V | 6. Stack Height: 55 feet | 7. Exit Diameter: 15.1 feet | |
| 8. Exit Temperature: 850°F | 9. Actual Volumetric Flow Rate: 1,000,000 acfm | 10. Water Vapor: N/A % | |
| 11. Maximum Dry Standard Flow Rate: N/A dscfm | | 12. Nonstack Emission Point Height: N/A feet | |
| 13. Emission Point UTM Coordinates... Zone: East (km): North (km): | | 14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS) | |
| 15. Emission Point Comment: | | | |

EMISSIONS UNIT INFORMATION

Section [1] of [4]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

| | | |
|--|---|---|
| 1. Segment Description (Process/Fuel Type): Internal Combustion Engines, Electric Generation, Natural Gas, Turbine | | |
| 2. Source Classification Code (SCC): 2-01-002-01 | | 3. SCC Units: Million cubic feet burned |
| 4. Maximum Hourly Rate: 0.550 | 5. Maximum Annual Rate: 4,814 | 6. Estimated Annual Activity Factor: N/A |
| 7. Maximum % Sulfur: N/A | 8. Maximum % Ash: N/A | 9. Million Btu per SCC Unit: 1,030 (HHV), nominal |
| 10. Segment Comment: Fields 4 and 5 maximum rates based on 566 MMBtu/hr at 59°F. | | |

Segment Description and Rate: Segment 2 of 2

| | | |
|---|--|---|
| 1. Segment Description (Process/Fuel Type): Internal Combustion Engines, Electric Generation, Distillate Oil (No. 2), Turbine | | |
| 2. Source Classification Code (SCC): 2-01-001-01 | | 3. SCC Units: Thousand gallons burned |
| 4. Maximum Hourly Rate: 4.101 | 5. Maximum Annual Rate: 35,929 | 6. Estimated Annual Activity Factor: N/A |
| 7. Maximum % Sulfur: 0.5 | 8. Maximum % Ash: 0.1 | 9. Million Btu per SCC Unit: 138 (HHV), nominal |
| 10. Segment Comment: Fields 4 and 5 maximum rates based on 566 MMBtu/hr at 59°F. | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___ of ___ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions ___ of ___

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: N/A |
| 3. Allowable Emissions and Units: 1.0 grain S / 100 cubic feet natural gas | 4. Equivalent Allowable Emissions: 1.7 lb/hour 7.4 tons/year |
| 5. Method of Compliance: Fuel analysis using ASTM methods | |
| 6. Allowable Emissions Comment (Description of Operating Method): Title V Permit No. 1030012-006-AV, Condition B.12. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: N/A |
| 3. Allowable Emissions and Units: 0.5 weight % S fuel oil | 4. Equivalent Allowable Emissions: 285.8 lb/hour 1,251.9 tons/year |
| 5. Method of Compliance: Fuel analysis using ASTM methods | |
| 6. Allowable Emissions Comment (Description of Operating Method): Title V Permit No. 1030012-006-AV, Condition B.12. | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| | | | |
|--|--|--|--|
| 1. Pollutant Emitted: VOC | | 2. Total Percent Efficiency of Control: N/A | |
| 3. Potential Emissions: 1.2 lb/hour 5.2 tons/year | | 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year | | | |
| 6. Emission Factor: 0.0021 lb/MMBtu Reference: Table 3.1-1, AP-42, April 2000 | | 7. Emissions Method Code: 3 | |
| 8.a. Baseline Actual Emissions (if required): Tons/year N/A | | 8.b. Baseline 24-month Period: N/A From: To: | |
| 9.a. Projected Actual Emissions (if required): Tons/year N/A | | 9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A | |
| 10. Calculation of Emissions: Hourly Rate: $\text{CO} = (0.0021 \text{ lb}/10^6 \text{ Btu}) \times (566 \times 10^6 \text{ Btu/hr}) = 1.2 \text{ lb/hr}$ Annual Rate: $\text{CO} = (1.2 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2,000 \text{ lb}) = 5.2 \text{ ton/yr}$ | | | |
| 11. Potential, Fugitive, and Actual Emissions Comment: Potential emissions based on natural gas-firing. | | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| | | | |
|--|--|--|--|
| 1. Pollutant Emitted: PM/PM₁₀ | | 2. Total Percent Efficiency of Control: N/A | |
| 3. Potential Emissions: 6.8 lb/hour 29.7 tons/year | | 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year | | | |
| 6. Emission Factor: 0.012 lb/MMBtu Reference: Table 3.1-2a, AP-42, April 2000 | | 7. Emissions Method Code: 3 | |
| 8.a. Baseline Actual Emissions (if required): Tons/year N/A | | 8.b. Baseline 24-month Period: N/A From: To: | |
| 9.a. Projected Actual Emissions (if required): Tons/year N/A | | 9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A | |
| 10. Calculation of Emissions: Hourly Rate: $PM/PM_{10} = (0.012 \text{ lb}/10^6 \text{ Btu}) \times (566 \times 10^6 \text{ Btu/hr}) = 6.8 \text{ lb/hr}$ Annual Rate: $PM/PM_{10} = (6.8 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2,000 \text{ lb}) = 29.7 \text{ ton/yr}$ | | | |
| 11. Potential, Fugitive, and Actual Emissions Comment: Potential emissions based on fuel oil-firing. | | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [1] of [4]

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---|--|
| 1. Visible Emissions Subtype: VE 20 | 2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: N/A % Maximum Period of Excess Opacity Allowed: N/A min/hour | |
| 4. Method of Compliance: EPA Reference Method 9 | |
| 5. Visible Emissions Comment: Rule 62-296.320(4)(b)1. and 4., F.A.C. | |

Visible Emissions Limitation: Visible Emissions Limitation of

| | |
|--|---|
| 1. Visible Emissions Subtype: | 2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour | |
| 4. Method of Compliance: | |
| 5. Visible Emissions Comment: | |

EMISSIONS UNIT INFORMATION

Section [1] of [4]

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

NOT APPLICABLE

Continuous Monitoring System: Continuous Monitor ___ of ___

| | |
|--|--|
| 1. Parameter Code: | 2. Pollutant(s): |
| 3. CMS Requirement: | <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 4. Monitor Information... Manufacturer: Model Number: Serial Number: | |
| 5. Installation Date: | 6. Performance Specification Test Date: |
| 7. Continuous Monitor Comment: | |

Continuous Monitoring System: Continuous Monitor ___ of ___

| | |
|--|--|
| 1. Parameter Code: | 2. Pollutant(s): |
| 3. CMS Requirement: | <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 4. Monitor Information... Manufacturer: Model Number: Serial Number: | |
| 5. Installation Date: | 6. Performance Specification Test Date: |
| 7. Continuous Monitor Comment: | |

EMISSIONS UNIT INFORMATION

Section [1] of [4]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

| |
|--|
| 1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attach. C <input type="checkbox"/> Previously Submitted, Date: _____ |
| 2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attach. K <input type="checkbox"/> Previously Submitted, Date: _____ |
| 3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attach. L <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable (construction application) |
| 5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: 04/09/ 2012 Test Date(s)/Pollutant(s) Tested: 03/01/2012; VE <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application. |
| 7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

NOTE:

Emission Unit ID No. -004 (CTP 1) and Emission Unit ID No. -005 (CTP 2) are identical emission units.

The information provided in Section III. Emissions Unit Information, Section 1 for Emission Unit ID No. -004 is also applicable to Section 2 for EU ID No. -005 with the exception of identification numbers.

VE test for CTP 2 will be conducted upon completion of repairs to allow oil-firing.

EMISSIONS UNIT INFORMATION

Section [3] of [4]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Combustion Turbine Peaking Unit No. 3 (CTP 3)

3. Emissions Unit Identification Number: **-006**

| | | | |
|--|---|--|---|
| 4. Emissions Unit Status Code: A | 5. Commence Construction Date: N/A | 6. Initial Startup Date: N/A | 7. Emissions Unit Major Group SIC Code: 49 |
|--|---|--|---|

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

9. Package Unit:
Manufacturer: **Pratt & Whitney** Model Number: **Twin-Pac**

10. Generator Nameplate Rating: **42.9** MW

11. Emissions Unit Comment:

CTP 3 consists of two Pratt & Whitney SCCTs that power a common 42.9 MW generator.

EMISSIONS UNIT INFORMATION

Section [3] of [4]

NOT APPLICABLE

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

Emissions Unit Control Equipment/Method: Control ___ of ___

| |
|--|
| 1. Control Equipment/Method Description: |
| 2. Control Device or Method Code: |

EMISSIONS UNIT INFORMATION

Section [3] of [4]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

| |
|--|
| 1. Maximum Process or Throughput Rate: N/A |
| 2. Maximum Production Rate: N/A |
| 3. Maximum Heat Input Rate: 631 million Btu/hr, higher heating value (HHV) |
| 4. Maximum Incineration Rate: pounds/hr N/A tons/day |
| 5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8,760 hours/year |
| 6. Operating Capacity/Schedule Comment: Maximum heat input rate shown in Field 3 is at 59°F ambient temperature. |

EMISSIONS UNIT INFORMATION

Section [3] of [4]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

| | | | |
|--|--|---|--|
| 1. Identification of Point on Plot Plan or Flow Diagram: CTP 3 | | 2. Emission Point Type Code: 1 | |
| 3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A | | | |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A | | | |
| 5. Discharge Type Code: V | 6. Stack Height: 55 feet | 7. Exit Diameter: 15.1 feet | |
| 8. Exit Temperature: 850°F | 9. Actual Volumetric Flow Rate: 1,000,000 acfm | 10. Water Vapor: N/A % | |
| 11. Maximum Dry Standard Flow Rate: N/A dscfm | | 12. Nonstack Emission Point Height: N/A feet | |
| 13. Emission Point UTM Coordinates... Zone: East (km): North (km): | | 14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS) | |
| 15. Emission Point Comment: | | | |

EMISSIONS UNIT INFORMATION

Section [3] of [4]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

| | | |
|--|---|---|
| 1. Segment Description (Process/Fuel Type): Internal Combustion Engines, Electric Generation, Natural Gas, Turbine | | |
| 2. Source Classification Code (SCC): 2-01-002-01 | | 3. SCC Units: Million cubic feet burned |
| 4. Maximum Hourly Rate: 0.613 | 5. Maximum Annual Rate: 5,367 | 6. Estimated Annual Activity Factor: N/A |
| 7. Maximum % Sulfur: N/A | 8. Maximum % Ash: N/A | 9. Million Btu per SCC Unit: 1,030 (HHV), nominal |
| 10. Segment Comment: Fields 4 and 5 maximum rates based on 631 MMBtu/hr at 59°F. | | |

Segment Description and Rate: Segment 2 of 2

| | | |
|---|--|---|
| 1. Segment Description (Process/Fuel Type): Internal Combustion Engines, Electric Generation, Distillate Oil (No. 2), Turbine | | |
| 2. Source Classification Code (SCC): 2-01-001-01 | | 3. SCC Units: Thousand gallons burned |
| 4. Maximum Hourly Rate: 4.572 | 5. Maximum Annual Rate: 40,055 | 6. Estimated Annual Activity Factor: N/A |
| 7. Maximum % Sulfur: 0.5 | 8. Maximum % Ash: 0.1 | 9. Million Btu per SCC Unit: 138 (HHV), nominal |
| 10. Segment Comment: Fields 4 and 5 maximum rates based on 631 MMBtu/hr at 59°F. | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: N/A |
| 3. Allowable Emissions and Units: 1.0 grain S / 100 cubic feet natural gas | 4. Equivalent Allowable Emissions: 1.9 lb/hour 8.2 tons/year |
| 5. Method of Compliance: Fuel analysis using ASTM methods | |
| 6. Allowable Emissions Comment (Description of Operating Method): Title V Permit No. 1030012-006-AV, Condition B.12. | |

Allowable Emissions Allowable Emissions 2 of 2

| | |
|--|--|
| 1. Basis for Allowable Emissions Code: OTHER | 2. Future Effective Date of Allowable Emissions: N/A |
| 3. Allowable Emissions and Units: 0.5 weight % S fuel oil | 4. Equivalent Allowable Emissions: 318.7 lb/hour 1,395.7 tons/year |
| 5. Method of Compliance: Fuel analysis using ASTM methods | |
| 6. Allowable Emissions Comment (Description of Operating Method): Title V Permit No. 1030012-006-AV, Condition B.12. | |

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| | | | |
|--|--|--|--|
| 1. Pollutant Emitted: CO | | 2. Total Percent Efficiency of Control: N/A | |
| 3. Potential Emissions: 51.7 lb/hour 226.6 tons/year | | 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year | | | |
| 6. Emission Factor: 0.082 lb/MMBtu Reference: Table 3.1-1, AP-42, April 2000 | | 7. Emissions Method Code: 3 | |
| 8.a. Baseline Actual Emissions (if required): Tons/year N/A | | 8.b. Baseline 24-month Period: N/A From: To: | |
| 9.a. Projected Actual Emissions (if required): Tons/year N/A | | 9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A | |
| 10. Calculation of Emissions: <p>Hourly Rate:</p> $\text{CO} = (0.082 \text{ lb}/10^6 \text{ Btu}) \times (631 \times 10^6 \text{ Btu/hr}) = 51.7 \text{ lb/hr}$ <p>Annual Rate:</p> $\text{CO} = (51.7 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2,000 \text{ lb}) = 226.6 \text{ ton/yr}$ | | | |
| 11. Potential, Fugitive, and Actual Emissions Comment: <p>Potential emissions based on natural gas-firing.</p> | | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions __ of __

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| | | | |
|---|--|--|---------------------------------------|
| 1. Pollutant Emitted: VOC | | 2. Total Percent Efficiency of Control: N/A | |
| 3. Potential Emissions: 1.3 lb/hour | | 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| | | 5.8 tons/year | |
| 5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year | | | |
| 6. Emission Factor: 0.0021 lb/MMBtu Reference: Table 3.1-1, AP-42, April 2000 | | | 7. Emissions Method Code: 3 |
| 8.a. Baseline Actual Emissions (if required): Tons/year N/A | | 8.b. Baseline 24-month Period: N/A From: To: | |
| 9.a. Projected Actual Emissions (if required): Tons/year N/A | | 9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A | |
| 10. Calculation of Emissions: Hourly Rate: $CO = (0.0021 \text{ lb}/10^6 \text{ Btu}) \times (631 \times 10^6 \text{ Btu/hr}) = 1.3 \text{ lb/hr}$ Annual Rate: $CO = (1.3 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2,000 \text{ lb}) = 5.8 \text{ ton/yr}$ | | | |
| 11. Potential, Fugitive, and Actual Emissions Comment: Potential emissions based on natural gas-firing. | | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___ of ___ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions ___ of ___

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| | | | |
|--|--|--|--|
| 1. Pollutant Emitted: PM/PM₁₀ | | 2. Total Percent Efficiency of Control: N/A | |
| 3. Potential Emissions: 7.6 lb/hour 33.2 tons/year | | 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| 5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year | | | |
| 6. Emission Factor: 0.012 lb/MMBtu Reference: Table 3.1-2a, AP-42, April 2000 | | 7. Emissions Method Code: 3 | |
| 8.a. Baseline Actual Emissions (if required): Tons/year N/A | | 8.b. Baseline 24-month Period: N/A From: To: | |
| 9.a. Projected Actual Emissions (if required): Tons/year N/A | | 9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years N/A | |
| 10. Calculation of Emissions: Hourly Rate: $PM/PM_{10} = (0.012 \text{ lb}/10^6 \text{ Btu}) \times (631 \times 10^6 \text{ Btu/hr}) = 7.6 \text{ lb/hr}$ Annual Rate: $PM/PM_{10} = (7.6 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton}/2,000 \text{ lb}) = 33.2 \text{ ton/yr}$ | | | |
| 11. Potential, Fugitive, and Actual Emissions Comment: Potential emissions based on fuel oil-firing. | | | |

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___ of ___ **NOT APPLICABLE**

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

Allowable Emissions Allowable Emissions ___ of ___

| | |
|---|--|
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: | |
| 6. Allowable Emissions Comment (Description of Operating Method): | |

EMISSIONS UNIT INFORMATION

Section [3] of [4]

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

| | |
|---|--|
| 1. Visible Emissions Subtype: VE 20 | 2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: N/A % Maximum Period of Excess Opacity Allowed: N/A min/hour | |
| 4. Method of Compliance: EPA Reference Method 9 | |
| 5. Visible Emissions Comment: Rule 62-296.320(4)(b)1. and 4., F.A.C. | |

Visible Emissions Limitation: Visible Emissions Limitation of

| | |
|---|---|
| 1. Visible Emissions Subtype: | 2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour | |
| 4. Method of Compliance: | |
| 5. Visible Emissions Comment: | |

EMISSIONS UNIT INFORMATION

Section [3] of [4]

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

NOT APPLICABLE

Continuous Monitoring System: Continuous Monitor ___ of ___

| | |
|--|--|
| 1. Parameter Code: | 2. Pollutant(s): |
| 3. CMS Requirement: | <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 4. Monitor Information... Manufacturer: Model Number: Serial Number: | |
| 5. Installation Date: | 6. Performance Specification Test Date: |
| 7. Continuous Monitor Comment: | |

Continuous Monitoring System: Continuous Monitor ___ of ___

| | |
|--|--|
| 1. Parameter Code: | 2. Pollutant(s): |
| 3. CMS Requirement: | <input type="checkbox"/> Rule <input type="checkbox"/> Other |
| 4. Monitor Information... Manufacturer: Model Number: Serial Number: | |
| 5. Installation Date: | 6. Performance Specification Test Date: |
| 7. Continuous Monitor Comment: | |

EMISSIONS UNIT INFORMATION

Section [3] of [4]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

| |
|---|
| 1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. C</u> <input type="checkbox"/> Previously Submitted, Date: _____ |
| 2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. K</u> <input type="checkbox"/> Previously Submitted, Date: _____ |
| 3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. L</u> <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable (construction application) |
| 5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable |
| 6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <u>VE test for CTP 3 will be conducted following repairs to allow oil-firing.</u> <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application. |
| 7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

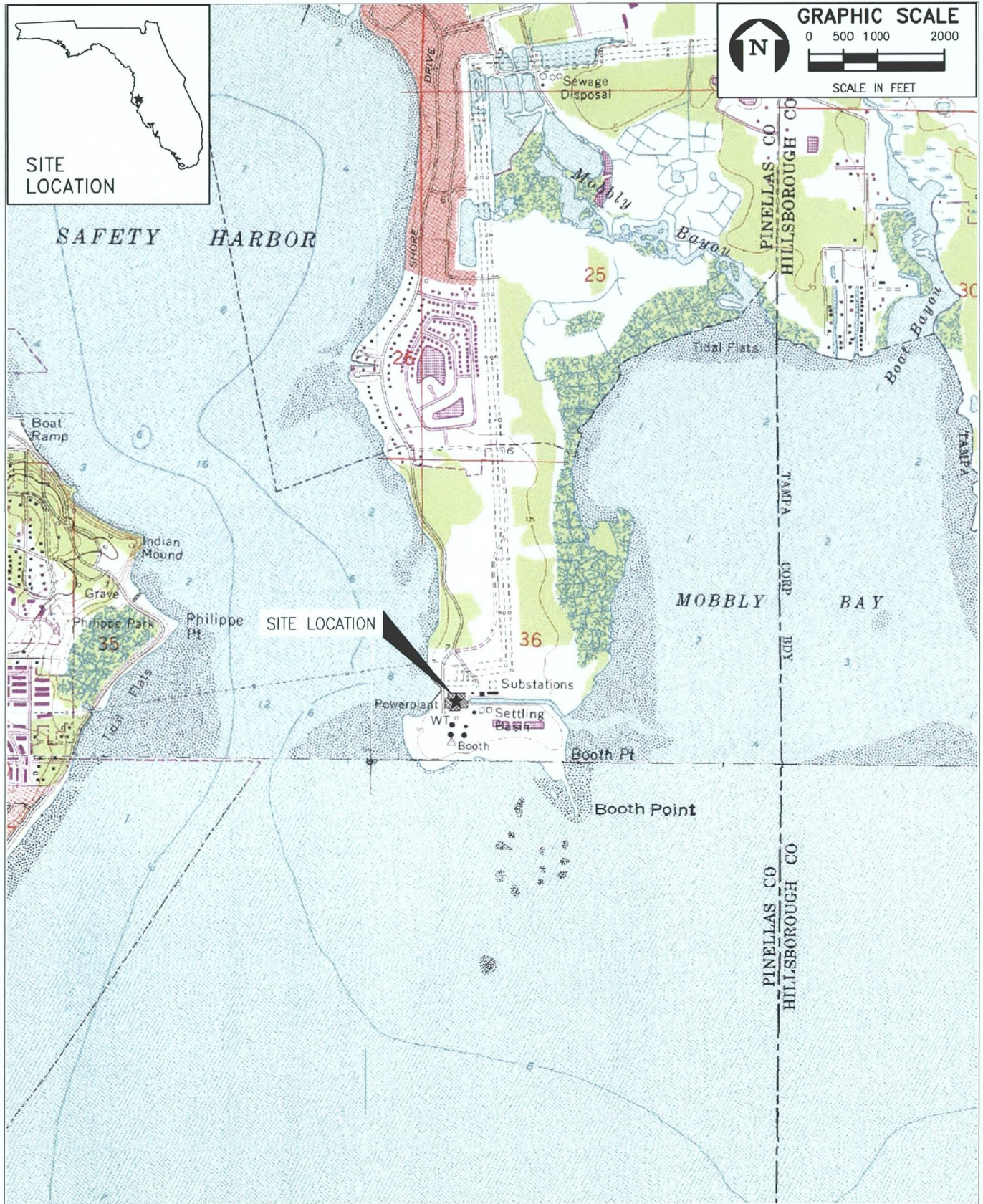
NOTE:

Emission Unit ID No. -006 (CTP 3) and Emission Unit ID No. -007 (CTP 4) are identical emission units.

The information provided in Section III. Emissions Unit Information, Section 3 for Emission Unit ID No. -006 is also applicable to Section 4 for EU ID No. -007 with the exception of identification numbers.

VE test for CTP 4 was conducted on March 1, 2012 and submitted to the Pinellas County Department of Environmental Management, Air Quality Division in correspondence dated April 9, 2012.

ATTACHMENT A
FACILITY LOCATION MAP



ATTACHMENT A.
 FACILITY LOCATION MAP
 HIGGINS POWER PLANT

Sources: USGS Quad: Oldsmar, Safety Harbor, FL, 1987; ECT, 2012.



ATTACHMENT B
FACILITY PLOT PLANS



CTP 1, CTP 2, CTP 3, CTP 4
EU-004, EU-005, EU-006, EU-007

B-1

ATTACHMENT B-1.

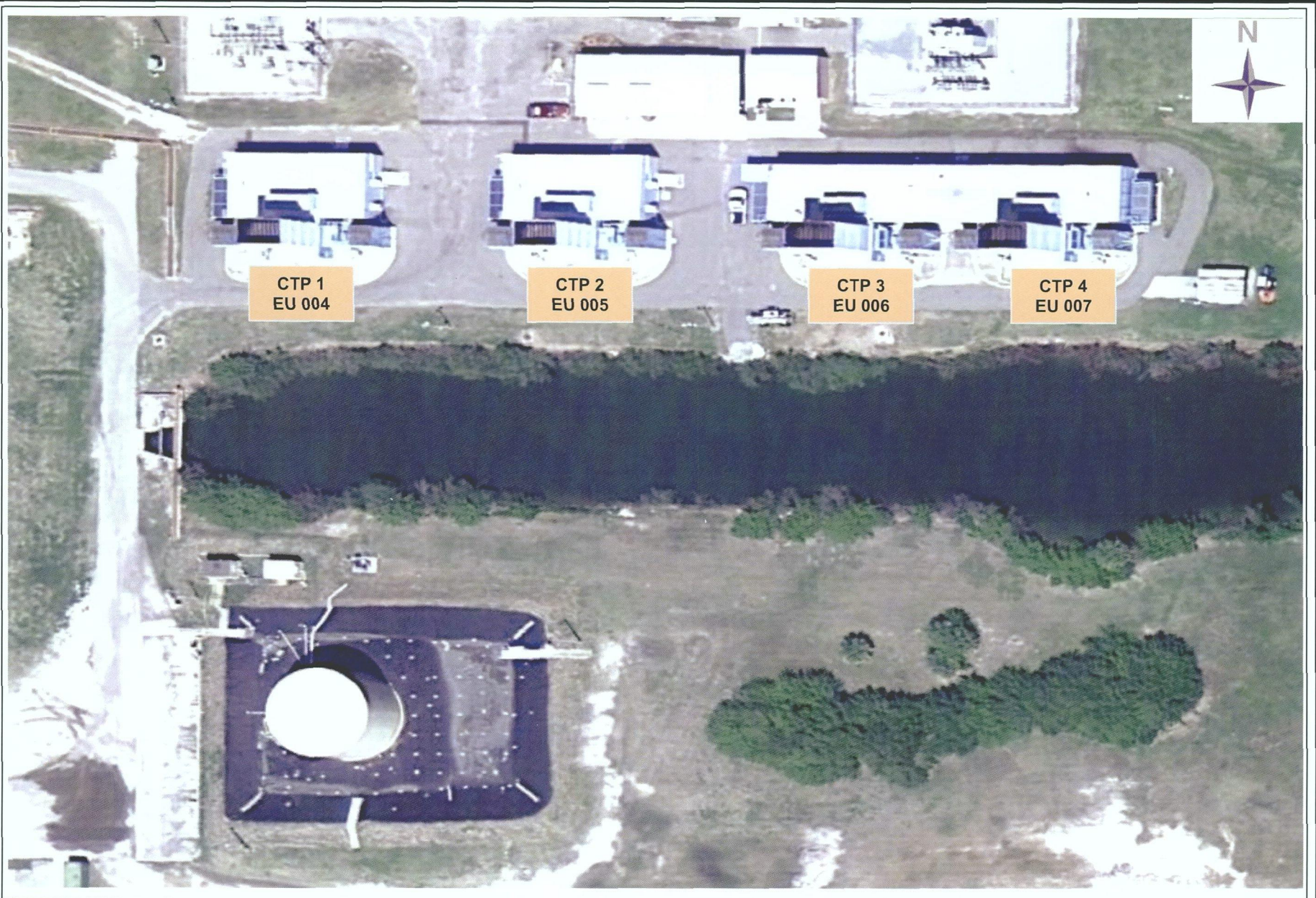
HIGGINS POWER PLANT PLOT PLAN—OVERVIEW

Source: ECT, 2012.



Progress Energy

People. Performance. Excellence.



B-2

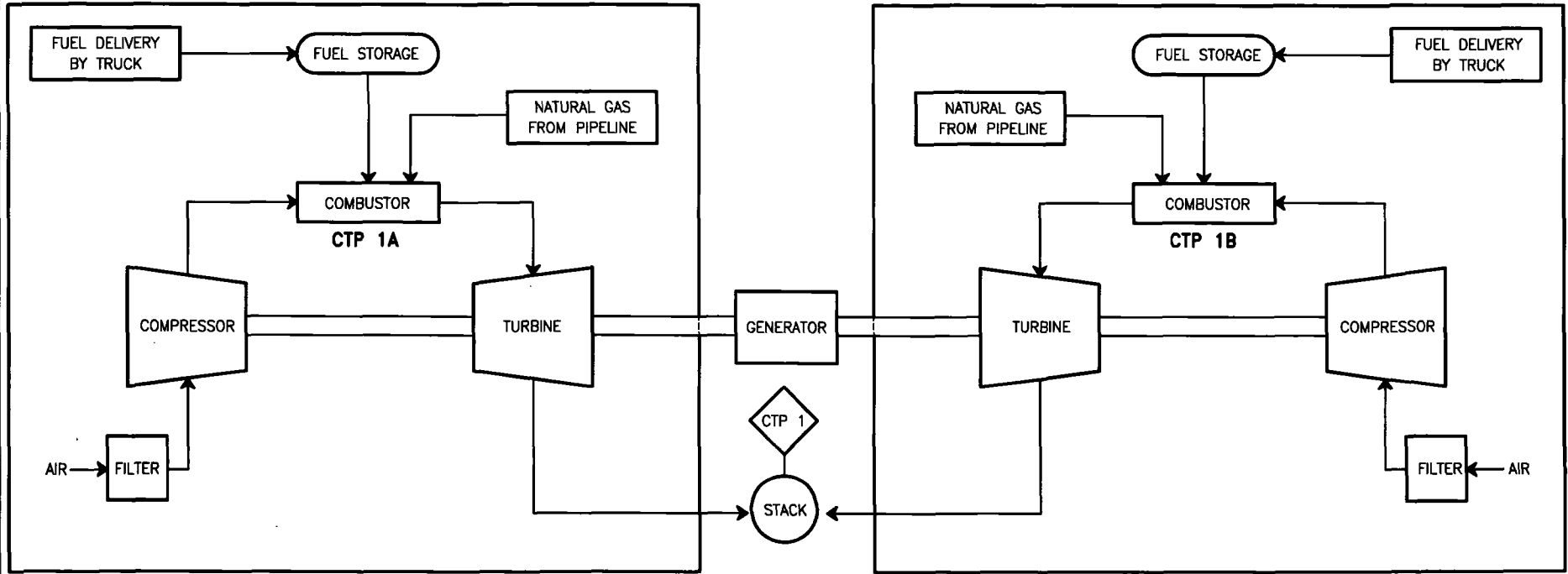
ATTACHMENT B-2.

HIGGINS POWER PLANT PLOT PLAN—COMBUSTION TURBINE
PEAKING UNITS

Source: ECT, 2012.



ATTACHMENT C
PROCESS FLOW DIAGRAM



PRATT & WHITNEY
SIMPLE CYCLE COMBUSTION TURBINE
PEAKING UNIT: CTP 1

NOTE: SAME ARRANGEMENT FOR CTP 2, CTP 3, AND CTP 4.

ATTACHMENT C.
HIGGINS POWER PLANT - PROCESS FLOW DIAGRAM
COMBUSTION TURBINE PEAKING UNITS: CTP 1, CTP 2, CTP 3, AND CTP 4

Source: ECT, 2012.



C-1

ATTACHMENT D

**PRECAUTIONS TO PREVENT EMISSIONS
OF UNCONFINED PARTICULATE MATTER**

ATTACHMENT D

HIGGINS POWER PLANT PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter (PM) emissions that may result from operations at the Higgins Power Plant include:

- Vehicular traffic on paved and unpaved roads.
- Wind-blown dust from material storage and yard areas.
- Periodic abrasive blasting.

The following techniques may be used to control unconfined PM emissions on an as-needed basis:

- Paving and maintenance of roads, parking areas, and yards.
- Chemical (dust suppressants) or water application to:
 - Unpaved roads.
 - Unpaved yard areas.
 - Open stock piles.
- Removal of PM from roads and other paved areas to prevent reentrainment and from buildings or work areas to prevent airborne particulate.
- Use of hoods, fans, filters, and similar equipment to contain, capture, and/or vent PM.
- Confining abrasive blasting where possible.
- Other techniques, as necessary.

ATTACHMENT E
LIST OF INSIGNIFICANT ACTIVITIES

ATTACHMENT E
HIGGINS POWER PLANT
LIST OF INSIGNIFICANT ACTIVITIES

1. Lubricating oil system vents
2. Lubricating oil reservoir tank
3. Parts washers/degreasers
4. Waste oil storage tanks
5. Lubricating oil storage shed
6. Surface coating and solvent cleaning
7. One 405,000-gallon No. 2 fuel oil storage tank
8. Four 550-gallon false start (No. 2 fuel oil) storage tanks
9. No. 2 diesel truck fueling station
10. Four 750-gallon lubricating oil tanks

ATTACHMENT F

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT F

**SANTA ROSA ENERGY CENTER
IDENTIFICATION OF APPLICABLE REQUIREMENTS**

A. FACILITYWIDE REQUIREMENTS

FEDERAL:

40 CFR 82: Protection of Stratospheric Ozone
40 CFR 82, Subpart F: Recycling and Emissions Reduction

STATE:

Chapter 62-4, F.A.C.: Permits, effective 03/16/08

| | |
|-------------------|--|
| 62-4.030, F.A.C.: | General Prohibition |
| 62-4.040, F.A.C.: | Exemptions |
| 62-4.050, F.A.C.: | Procedure to Obtain Permits; Application |
| 62-4.060, F.A.C.: | Consultation |
| 62-4.070, F.A.C.: | Standards for Issuing or Denying Permits; Issuance; Denial |
| 62-4.080, F.A.C.: | Modification of Permit Conditions |
| 62-4.090, F.A.C.: | Renewals |
| 62-4.100, F.A.C.: | Suspension and Revocation |
| 62-4.110, F.A.C.: | Financial Responsibility |
| 62-4.120, F.A.C.: | Transfer of Permits |
| 62-4.130, F.A.C.: | Plant Operation – Problems |
| 62-4.150, F.A.C.: | Review |
| 62-4.160, F.A.C.: | Permit Conditions |
| 62-4.210, F.A.C.: | Construction Permits |
| 62-4.220, F.A.C.: | Operation Permit for New Sources |

Chapter 62-210, F.A.C.: Stationary Sources - General Requirements, effective 03/28/12

| | |
|------------------------|---|
| 62-210.300, F.A.C.: | Permits Required |
| 62-210.300(1), F.A.C.: | Air Construction Permits |
| 62-210.300(2), F.A.C.: | Air Operation Permits |
| 62-210.300(3), F.A.C.: | Exemptions from Permitting |
| 62-210.300(5), F.A.C.: | Notification of Startup |
| 62-210.300(6), F.A.C.: | Emissions Unit Reclassification |
| 62-210.300(7), F.A.C.: | Transfer of Air Permits |
| 62-210.350, F.A.C.: | Public Notice and Comment |
| 62-210.350(1), F.A.C.: | Public Notice of Proposed Agency Action |

ATTACHMENT F

SANTA ROSA ENERGY CENTER IDENTIFICATION OF APPLICABLE REQUIREMENTS

- 62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review
- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources
- 62-210.360, F.A.C.: Administrative Permit Corrections and Amendments
- 62-210.370(2), F.A.C.: Computation of Emissions
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility
- 62-210.650, F.A.C.: Circumvention
- 62-210.700, F.A.C.: Excess Emissions
- 62-210.900, F.A.C.: Forms and Instructions
- 62-210.900(1), F.A.C.: Application for Air Permit – Long Form, Form and Instructions
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

Chapter 62-212, F.A.C.: Stationary Sources - Preconstruction Review, effective 03/28/12

- 62-212.300, F.A.C.: General Preconstruction Review Requirements
- 62-212.400, F.A.C.: Prevention of Significant Deterioration (PSD)
- 62-212.500, F.A.C.: Preconstruction Review for Nonattainment Areas
- 62-212.720, F.A.C.: Actuals Plantwide Applicability Limits (PALS)

Chapter 62-213, F.A.C.: Operation Permits for Major Sources of Air Pollution, effective 02/06/12

- 62-213.205, F.A.C.: Annual Emissions Fee
- 62-213.400, F.A.C.: Permits and Permit Revisions Required
- 62-213.405, F.A.C.: Concurrent Processing of Permit Applications
- 62-213.410, F.A.C.: Changes without Permit Revision
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process
- 62-213.415, F.A.C.: Trading of Emissions within a Source
- 62-213.420, F.A.C.: Permit Applications

ATTACHMENT F

SANTA ROSA ENERGY CENTER
IDENTIFICATION OF APPLICABLE REQUIREMENTS

62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision
62-213.440, F.A.C.: Permit Content
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield

62-213.900, F.A.C.: Forms and Instructions
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form
62-213.900(7), F.A.C.: Statement of Compliance Form
62-213.900(8), F.A.C.: Responsible Official Notification Form

Chapter 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 10/06/08

Chapter 62-296, F.A.C.: Stationary Sources - Emissions Standards, effective 02/06/12

62-296.320(2), F.A.C.: Objectionable Odor Prohibited
62-296.320(3), F.A.C.: Permitted Open Burning
62-296.320(4)(b), F.A.C.: General Visible Emissions Standard
62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter

Chapter 62-297, F.A.C.: Stationary Sources - Emissions Monitoring, effective 02/06/12

62-297.310, F.A.C.: General Test Requirements
62-297.320, F.A.C.: Standards for Persons Engaged in Visible Emissions Observations
62-297.401, F.A.C.: Compliance Test Methods
62-297.440, F.A.C.: Supplementary Test Procedures
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements

MISCELLANEOUS:

Chapter 28-106, F.A.C.: Decisions Determining Substantial Interests, effective 12/24/07

Chapter 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07/01/98

ATTACHMENT F

**SANTA ROSA ENERGY CENTER
IDENTIFICATION OF APPLICABLE REQUIREMENTS**

B. COMBUSTION TURBINE PEAKING UNITS CTP 1 THROUGH CTP 4

FINAL Permit No: 1030012-006-AV, Section III., Subsection B, Permit Condition Nos. B.1 through B.182 [Please see Attachment H for requested changes to the current Title V Air Operation Permit]

ATTACHMENT G
COMPLIANCE REPORT

ATTACHMENT G

**HIGGINS POWER PLANT
COMPLIANCE REPORT**

Attachment F to this Title V operation permit renewal application identifies the requirements that are applicable to the emissions units that comprise this Title V source.

A copy of the most recent Higgins Power Plant Annual Statement of Compliance – Title V Source is provided in this attachment.



Progress Energy

February 22, 2012

Mr. Gary Robbins
Pinellas County Department of Environmental Management
Air Quality Division
300 South Garden Avenue
Clearwater, FL 33756

Dear Mr. Robbins:

Re: Annual Statement of Compliance
Florida Power Higgins Facility
Facility ID No. 1030012

As required by Rule 62-213.440(3)(a)(2), Progress Energy submits the attached Annual Statement of Compliance for the above-referenced facility.

Please contact Gus Schaefer at (727) 409-3989 if you have any questions or would like additional information.

Sincerely,

Reginald D. Anderson
Plant Manager

cc: Ms. Roselyn Hughes, EPA Region IV



Department of
Environmental Protection
Division of Air Resources Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

Facility Owner/Company Name: Progress Energy Florida, Inc.

Site Name: Higgins Plant County: Pinellas

Title V Air Operation Permit No.: 1030012-006-AV

| REPORTING PERIOD | REPORT DEADLINE* |
|---|----------------------|
| <u>January 1</u> through <u>December 31</u> of <u>2011</u> (year) | <u>March 1, 2012</u> |

*See Rule 62-213.440(3)(a)2, F.A.C.

COMPLIANCE STATEMENT (Check only one of the following three options)

A. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

B. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

C. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number.
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am the responsible official as defined in Chapter 62-210:200, F.A.C., of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.



(Signature of Title V Source Responsible Official)

2/22/12


(Date)

Name: Reginald D. Anderson

Title: Plant Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.



(Signature of Acid Rain Source Designated Representative)

2/21/12

(Date)

Name: Patricia Q. West

Title: Manager- Environmental Services - Energy Supply FL

{Note: Attachments, if required, are created by the responsible official or the designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by the responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. EPA (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

Progress Energy Florida
Higgins Combustion Turbines - January 1, 2011 thru June 30, 2011
Malfunction Events

During the first two quarters of calendar year 2011, no deviations occurred for Unit No. 1
No. 2, No. 3, and No. 4.

| <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Parameter</u> | <u>Description</u> |
|-------------|-------------|-----------------|------------------|--------------------|
|-------------|-------------|-----------------|------------------|--------------------|

None to report for the first two quarters of 2011

Progress Energy Florida
Higgins Combustion Turbines - July 1, 2011 thru December 31, 2011
Malfunction Events

During the last two quarters of calendar year 2011, no deviations occurred for Unit No. 1
No. 2, No. 3, and No. 4.

| <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Parameter</u> | <u>Description</u> |
|-------------|-------------|-----------------|------------------|--------------------|
|-------------|-------------|-----------------|------------------|--------------------|

None to report for the last two quarters of 2011

ATTACHMENT H

**REQUESTED CHANGES TO CURRENT
TITLE V AIR OPERATION PERMIT**

ATTACHMENT H
HIGGINS POWER PLANT
REQUESTED CHANGES TO
CURRENT TITLE V AIR OPERATION PERMIT

The following change to the current Higgins Power Plant Title V Permit No. 1030012-006-AV is requested.

1. Visible Emissions (VE) Test Requirements

Condition B.15 requires a VE test for each combustion turbine (CT) peaking unit while firing fuel oil prior to obtaining a renewed operation permit. Condition B.16 contains a similar VE test requirement on an annual basis but excludes testing if a unit fired fuel oil for less than 400 hours per year (hr/yr).

The Higgins Power Plant CT peaking units seldom fire fuel oil. This will continue to be the case in the future since natural gas prices are projected to remain low for many years. Accordingly, to comply with Condition B.15, each CT peaking unit would need to be fired with fuel oil prior to operation permit renewal solely for the purpose of conducting a VE test.

It is long-standing FDEP policy to not require an emissions unit to operate solely for the purpose of testing. To do so will result in emissions that would otherwise not occur. For the Higgins Power Plant CT peaking units, firing the units on fuel oil instead of natural gas will result in an unnecessary increase in emissions and a significant adverse economic impact due to the much higher price of fuel oil compared to natural gas.

PEF therefore requests the following revision to Condition B.16:

B.16. Visible Emissions Testing—Annual and Prior to Operation Permit Renewal. Notwithstanding the requirements of Condition B.15, by this permit condition annual emissions compliance testing and compliance testing prior to operation permit renewal for visible emissions is not required for these emissions units while burning:

ATTACHMENT H

HIGGINS POWER PLANT REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

- a. only gaseous fuels; or
- b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hr/yr; or
- c. only liquid fuels for less than 400 hr/yr.

2. Temporary Use of Replacement CTs

The Higgins Power Plant includes four Pratt & Whitney Twin-Pac simple-cycle CT peaking units. Each Twin-Pac unit is comprised of two simple-cycle CTs that power a common generator. To facilitate routine repairs of the modular CTs, PEF requests approval to swap out a CT with a spare CT that is stored at PEF's Intercession City facility CT repair shop. Once the removed CT is repaired/overhauled, it will be placed back into the location from which it was removed at the Higgins Power Plant, and the temporary CT will be returned to the repair shop until needed for another swap. While the temporary CT is operating, for Clean Air Interstate Rule (CAIR) purposes, the highest nitrogen oxides (NO_x) rate is reported. When the repaired CT is returned to service, the original NO_x predictive emissions monitoring system curve is utilized.

Based on this, PEF requests the following permit condition:

B.19. Temporary Use of Replacement CTs

To facilitate routine repair and overhaul of the modular CTs), temporary use of identical CT model replacement units is authorized as follows:

- a. The requirements of Conditions B.4 through B.8 and B.17 shall apply to the temporary replacement CT.
- b. Written notification of temporary replacement CT installation. Written notification (by letter or em-ail) of the planned date of temporary replacement CT installation shall be provided to the Air Quality Division of the Pinellas

ATTACHMENT H
HIGGINS POWER PLANT
REQUESTED CHANGES TO
CURRENT TITLE V AIR OPERATION PERMIT

Department of Environmental Management no less than 7 days prior to installation. Written notification shall include the following information:

- i. Identification of the CT being replaced (emissions unit number and facility location).
 - ii. Identification of the temporary replacement CT including make and model.
 - iii. Dates the temporary replacement CT will be brought onsite and commence operation.
 - iv. Expected period of time the temporary replacement CT will be operated.
- c. Written notification of temporary replacement CT removal. Written notification (by letter or e-mail) of the date the replacement CT is removed shall be provided to the Air Quality Division of the Pinellas Department of Environmental Management within 7 days following removal.

3. Classification of No. 2 Fuel Oil Storage Tank As an Insignificant Activity

Appendix U-1 list Fuel Storage Tanks (EU 010) as an unregulated emissions unit. The Higgins Power Plant includes one No. 2 fuel oil storage tank that has a nominal storage capacity of 405,000 gallons. This vertical fixed-roof storage tank has a diameter of 45.0 ft and height of 34.0 ft. The Higgins Power Plant also includes several small 550-gallon false start No. 2 fuel oil storage tanks.

Potential emissions of volatile organic compounds (VOCs) for the 405,000-gallon No. 2 fuel oil storage tank are estimated to be 0.81 ton per year using the U.S. Environmental Protection Agency (EPA) TANKS program. The nominal 405,000-gallon No. 2 fuel oil storage tank qualifies as an insignificant emissions unit pursuant to Rule 62-213.430(6), Florida Administrative Code (F.A.C.). PEF requests that this storage tank be included in

ATTACHMENT H
HIGGINS POWER PLANT
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Appendix I-1 as an insignificant emissions unit. The smaller 550-gallon No. 2 fuel oil storage tanks also qualify as insignificant emissions units.

PEF requests deletion of Appendix U-1 from the renewed Title V air operation permit, since there are no unregulated emissions units located at the Higgins Power Plant.

Attachment E of this Title V air operation permit renewal application includes all of Higgins Power Plant insignificant emissions units and activities.

ATTACHMENT I
ACID RAIN AND CAIR RETIRED UNIT EXEMPTION

Acid Rain and CAIR Retired Unit Exemption

For more information, see instructions and refer to 40 CFR 72.8, 96.105, 96.205, 96.305 and Rules 62-214.340(2) and 62-296.470, F.A.C.

New Revised Renewal

STEP 1

Identify the unit by plant name, State, ORIS code and unit ID#.

| | | | |
|-----------------------------------|------------------|------------------------|---------------|
| HIGGINS POWER PLANT Plant Name | FLORIDA State | 630 ORIS/Plant Code | 3 Unit ID# |
|-----------------------------------|------------------|------------------------|---------------|

Applicable Program(s): ~ Acid Rain ~ CAIR NO_x Annual ~ CAIR SO₂ ~ CAIR NO_x Ozone Season

STEP 2

Identify the date on which the unit was (or will be) permanently retired.

10 / 20 / 2006

STEP 3

If an acid rain affected unit, identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.8(d).

January 1, 2007

STEP 4

Read the special provisions.

Acid Rain Special Provisions

(1) A unit exempt under Rule 62-214.340(2), F.A.C., shall not emit any sulfur dioxide and nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with 40 CFR Part 73, Subpart B. If the unit is a Phase I unit, for each calendar year in Phase I, the designated representative of the unit shall submit a Phase I permit application in accordance with 40 CFR Part 72, Subparts C and D, and an annual certification report in accordance with 40 CFR 72.90 through 72.92 and is subject to 40 CFR 72.95 and 72.96.

(2) A unit exempt under Rule 62-214.340(2), F.A.C., shall not resume operation unless the designated representative of the source that includes the unit submits a complete Acid Rain Part application under Rule 62-214.320, F.A.C., for the unit not less than 24 months prior to the date on which the unit is first to resume operation.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(2), F.A.C., shall comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) For any period for which a unit is exempt under Rule 62-214.340(2), F.A.C., the unit is not an Acid Rain unit and is not eligible to be an opt-in source under 40 CFR Part 74. As a non-Acid Rain Unit, the unit shall continue to be subject to any other applicable requirements under Chapter 62-213, F.A.C.

(5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(2), F.A.C., shall retain at the source that includes the unit records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the DEP. The owners and operators bear the burden of proof that the unit is permanently retired.

(6) On the earlier of the following dates, a unit exempt under Rule 62-214.340(2), F.A.C., shall lose its exemption and become an Acid Rain Unit: (i) the date on which the designated representative submits an Acid Rain Part application under paragraph (2); or (ii) the date on which the designated representative is required under paragraph (2) to submit an Acid Rain Part application. For the purpose of applying monitoring requirements under 40 CFR Part 75, a unit that loses its exemption under Rule 62-214.340(2), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

Plant Name (from STEP 1) HIGGINS POWER PLANT

STEP 4
(continued)

CAIR Special Provisions

- (1) A unit exempt under 40 CFR 96.105(a), 96.205(a), or 96.305(a), shall not emit any sulfur dioxide or nitrogen oxides starting on the date that the exemption takes effect. The DEP will allocate CAIR NO_x allowances in accordance with Rule 62-296.470, F.A.C.
- (2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-296.470, F.A.C., shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the DEP. The owners and operators bear the burden of proof that the unit is permanently retired.
- (3) The owners and operators and, to the extent applicable, the CAIR designated representative of a unit exempt under 40 CFR 96.105(a), 96.205(a), or 96.305(a), shall comply with the applicable requirements of the CAIR NO_x Annual Trading Program, the CAIR SO₂ Trading Program, and the CAIR NO_x Ozone Season Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
- (4) A unit exempt under 40 CFR 96.105(a), 96.205(a), or 96.305(a), and located at a source that is required, or but for this exemption would be required, to have a title V operating permit shall not resume operation unless the CAIR designated representative of the source submits a complete CAIR Part application under Rule 62-213.420, F.A.C., for the unit before the date on which the unit resumes operation.
- (5) On the earlier of the following dates, a unit exempt under 40 CFR 96.105(a), 96.205(a), or 96.305(a) shall lose its exemption:
 - (i) the date on which the CAIR designated representative submits a CAIR Part application under Special Provision (4) above;
 - (ii) the date on which the CAIR designated representative is required under Special Provision (4) above to submit an CAIR Part application for the unit; or
 - (iii) the date on which the unit resumes operation, if the CAIR designated representative is not required to submit a CAIR Part application for the unit.
- (6) For the purpose of applying monitoring, reporting and recordkeeping requirements under 40 CFR Part 96, Subparts HH, HHH, and/or HHHH, a unit that loses its exemption under 40 CFR 96.105(a), 96.205(a), or 96.305(a), shall be treated as a unit that commences commercial operation on the first date on which the unit resumes operation.

Plant Name (from STEP 1) HIGGINS POWER PLANT

STEP 5
Make Statement of Compliance.

Statement of Compliance

I state that the unit identified above in STEP 1 was (or will be) permanently retired on the date identified in STEP 2 and will comply with the Special Provisions listed in STEP 4.

STEP 6
Read the certification and sign and date.

Certification (for designated representatives or alternate designated representatives only)

I am authorized to make this submission on behalf of the owners and operators of the affected source and affected unit for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|--|
| Name: Patricia Q. West | Title: Manager, Environmental, Energy Supply - Florida |
| Owner Company Name: Florida Power Corporation d/b/a Progress Energy Florida, Inc. | |
| Phone: (727) 820-5739 | Email: Patricia.West@pgnmail.com |
| Signature <i>Patricia Q. West</i> | Date <i>4/26/12</i> |

ATTACHMENT J
CLEAN AIR INTERSTATE RULE PART

Plant Name (from STEP 1) HIGGINS POWER PLANT

STEP 3

**Read the
standard
requirements.**

CAIR NO_x ANNUAL TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO_x unit shall be subject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

If a CAIR NO_x source emits NO_x during any control period in excess of the CAIR NO_x emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
 - (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program.
 - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

Plant Name (from STEP 1) HIGGINS POWER PLANT

**STEP 3,
Continued**

Liability.

- (1) Each CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program.
- (2) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source or the CAIR designated representative of a CAIR NO_x source shall also apply to the owners and operators of such source and of the CAIR NO_x units at the source.
- (3) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x unit or the CAIR designated representative of a CAIR NO_x unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO₂ Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR SO₂ allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO₂ unit.

Excess Emissions Requirements.

If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then:

- (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

Plant Name (from STEP 1) HIGGINS POWER PLANT

**STEP 3,
Continued**

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.
 - (i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.
 - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.
- (2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

- (1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.
- (2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.
- (3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
 - (ii) [Reserved];
- (2) The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_x Ozone Season source with the following CAIR NO_x Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
- (2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
- (3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
- (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
- (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a

CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x Ozone Season unit.

Plant Name (from STEP 1) **HIGGINS POWER PLANT**

**STEP 3,
Continued**

Excess Emissions Requirements.

If a CAIR NO_x Ozone Season source emits NO_x during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:
 (1) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
 (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
 (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
 (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
 (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.
 (2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.
 (2) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.
 (3) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Certification (for designated representative or alternate designated representative only)

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|--|--|
| Name: Patricia Q. West | Title: Manager, Environmental, Energy Supply - Florida |
| Company/Owner Name: Florida Power Corporation d/b/a Progress Energy Florida Inc. | |
| Phone: (727) 820-5739 | E-mail Address: Patricia.West@pgnmail.com |
| Signature <i>Patricia Q. West</i> | Date 4/26/12 |

ATTACHMENT K
FUEL ANALYSES OR SPECIFICATIONS

ATTACHMENT K
HIGGINS POWER PLANT
FUEL ANALYSES OR SPECIFICATIONS

A. Natural Gas (typical composition)

| Component | Mole Percent (by volume) |
|------------------------------|--|
| Gas Composition | |
| Hexane+ | 0.018 |
| Propane | 0.190 |
| I-butane | 0.010 |
| N-butane | 0.007 |
| Pentane | 0.002 |
| Nitrogen | 0.527 |
| Methane | 96.195 |
| CO ₂ | 0.673 |
| Ethane | 2.379 |
| Other Characteristics | |
| Heat content (HHV) | 1,030 Btu/ft ³ at 14.73 psia, dry |
| Real specific gravity | 0.5776 |
| Sulfur content | 1.0 gr/100 scf |

B. No. 2 Fuel Oil

| Specification | Units | No. 2 Distillate Fuel Oil |
|------------------------|---------------|---------------------------|
| Heat Content (nominal) | BTU/gal (HHV) | 138,000 |
| Sulfur Content | Weight % | 0.5 |
| Ash Content (nominal) | Weight % | 0.1 |

Note: Btu/ft³ = British thermal unit per cubic foot.
psia = pound per square inch absolute.
gr/100 scf = grain per 100 standard cubic foot.

ATTACHMENT L

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT L
HIGGINS POWER PLANT
PROCEDURES FOR STARTUP AND SHUTDOWN

COMBUSTION TURBINE PEAKING UNITS CTP-1 THROUGH CTP-4

STARTUP

Startup for the combustion turbines at the Higgins Power Plant begins with an electric control system using a switch to initiate the unit's startup cycle. The combustion turbine generator is then synchronized with the grid as soon as practical.

The combustion turbine peaking units have no emissions controls. If excess emissions are encountered during any startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective action taken or preventative measures adopted. Corrective actions may include but are not limited to switching the unit from automatic (remote) to local control. Best operating practices are adhered to, and all efforts are undertaken to minimize both the level and duration of such excess emissions.

SHUTDOWN

Shutdown of the combustion turbine peaking units is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the combustion turbine generator from the electrical grid), shutting off the fuel, and coasting to a stop.