TAMPA ELECTRIC

April 21, 2004

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APR 22 2004

BUREAU OF AIR REGULATION

Via FedEx
Airbill No. 7912 1830 9897

Mr. Jim Pennington
Florida Department of
Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Re: Tampa Electric Company
Polk Power Station
Title V Permit Renewal Application
Permit No. 1050233-012-AV

Dear Mr. Pennington: Project No.: 1050233-016-AV

Tampa Electric Company (TEC) submits a request for a renewal of the Polk Power Station (PPS) Title V Air Operation Permit No. 105233-012-AV. Pursuant to Rule 62-213.420(1)(a)3 and Rule 62-4.090, F.A.C., an application for renewal of a Title V operation permit must be submitted 180 days prior to expiration. Since Title V FINAL Permit Revision No. 1050233-012-AV expires on December 31, 2004, the permit renewal application for PPS must be submitted no later than July 5, 2004. This application package, consisting of the Department's *Application for Air Permit – Long Form* and all required supplemental facility and emission unit information, constitutes TEC's Title V permit renewal application for PPS and is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C. Also within the permit application as Attachment A-14 is a copy of the requested changes to the current Title V Air Operation permit submitted to the Department on December 5, 2003. This request addresses a number of minor items in the current Title V permit TEC believes can be improved through minor revisions and clarifications. TEC is awaiting for the DRAFT Title V permit to be issued by the Department. As noted on the application, none of the PPS emission units are subject to the Compliance Assurance Monitoring (CAM) Rule. Please find enclosed four (4) copies of the permit renewal application signed and sealed for PPS.

TEC appreciates the cooperation and consideration of the Department in this requested Title V permit renewal application for PPS. If you have any questions or comments pertaining to this request, please direct them to Raiza Calderon at (813) 228-4369.

Sincerely,

Laura R. Crouch
Manager - Air Programs
Environmental, Health, and Safety

EA/bmr/RC178

c/enc: Mr. Jerry Kissel, FDEP SW District

POLK POWER STATION

TITLE V OPERATION PERMIT RENEWAL APPLICATION

Prepared for:

TAMPA ELECTRIC
Tampa, Florida

Prepared by:

ECT

Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 030604-0100

April 2004

INTRODUCTION

The existing Tampa Electric Company (TEC) Polk Power Station (PPS) is an electric generation facility located near Mulberry, Polk County, Florida. PPS regulated and unregulated emission units include the following:

E.U. ID No.	Regulated Emissions Units
001	260 Megawatt (MW) Combined Cycle Combustion Turbine which fires syngas or No. 2 fuel oil
002	120 Million Btu per Hour Auxiliary Boiler which fires No. 2 fuel oil
003	Sulfuric Acid Plant
005	Solid Fuel Handling System
006	Solid Fuel Gasification System
009	Nominal 165 MW Simple Cycle Gas Turbine CTG-2 firing natural gas or No. 2 fuel oil
010	Nominal 165 MW Simple Cycle Gas Turbine CTG-3 firing natural gas or No. 2 fuel oil

E.U. ID No.	Unregulated Emissions Units
007	One or more emergency generators which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
008	One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

Operation of the Polk Power Station emission units is currently authorized by FINAL Title V Air Operation Permit No. 1050233-012-AV. FINAL Permit Revision No. 1050233-012-AV was issued with an effective date of January 1, 2000 and expires on December 31, 2004.

Subsequent to issuance of FINAL Title V Air Operation Permit No. 1050233-012-AV, TEC submitted notifications to the Department of generic exemptions for a coal residual beneficiation process and modifications to this process. As advised by the Department, the coal residual beneficiation process has been added to the list of Insignificant Emission Units.

In order to be subject to the CAM Rule contained in 40 Code of Federal Regulations (CFR) Part 64, an emission unit must:

1. Be located at a major source that is required to obtain Part 70 or 71 permit per 40 CFR 64.2(a);
2. Be subject to an emission limitation or standard for the applicable pollutant per 40 CFR 64.2(a)(1);
3. Use a control device to achieve compliance per 40 CFR 64.2(a)(2);
4. Have potential pre-control emissions of the applicable regulated pollutant at least 100 percent of the major source threshold amount per 40 CFR 64.2(a)(3); and
5. Not otherwise be exempt from CAM per 40 CFR 64.2(a)(b).

A discussion of CAM applicability for each of the PPS regulated emissions units follows:

Combustion Turbines (EUs 001, 009, and 010)

Neither the simple cycle (EUs 009 and 010) nor the combined cycle (EU 001) combustion turbines employ post-combustion control devices. NO_x control for EU 001 while firing syngas is achieved by syngas moisture saturation and the addition of nitrogen diluent. EUs 009 and 010 use low NO_x burners that are inherent to the combustion process. All three combustion turbines use water injection to control NO_x while firing fuel oil. Accordingly, none of the three combustion turbines employ a control device as defined by Part 64 and therefore are not subject to the CAM Rule. In addition, each combustion turbine is subject to the Acid Rain Program (ARP) and is equipped with systems to continuously monitor nitrogen oxides (NO_x) and sulfur dioxide (SO_2) emissions.

Auxiliary Boiler (EU 003)

The auxiliary boiler does not employ any control devices as defined by Part 64 and therefore is not subject to the CAM Rule.

Sulfuric Acid Plant (EU 004)

The sulfuric acid plant is subject to visible emissions (opacity), SO2, and sulfuric acid mist (SAM) emission limits. Since the sulfuric acid plant does not employ any post-process control devices for SO2, CAM is not applicable for this pollutant. SAM is controlled from the sulfuric acid plant by the use of mist eliminators. The permitted emission limit for SAM is 0.15 pounds per ton of 100 percent acid produced. The sulfuric acid plant also has a permitted capacity limit of 77,640 tons per year of 100 percent acid. Potential pre-control emissions of SAM are estimated to be 93 tons per year based on an AP-42 uncontrolled sulfuric acid plant SAM emission factor of 2.4 lb of SAM per ton of acid product. Therefore, it is concluded that the sulfuric acid plant is not subject to CAM for SAM since pre-control emission rates are less than the CAM major source applicability threshold of 100 tons per year.

Solid Fuel Handling System (EU 005)

There are several emission points (i.e., two fuel silos and fuel surge bin) in the solid fuel handling process that employ baghouse control systems. Each of these baghouses is subject to an opacity limit of 5 percent. However, there are no underlying PM emission limits. In addition, the pre-control PM emission rate for each of these emission points is estimated to be well below the CAM applicability threshold of 100 tons per year. Accordingly, the solid fuel handling emission unit is not subject to the CAM Rule.

Solid Fuel Gasification System (EU 006)

The solid fuel gasification system emission unit is not subject to any emission limitation or standard and therefore is not subject to the CAM Rule.

Pursuant to Rule 62-213.420(1)(a)3. and Rule 62-4.090, F.A.C., an application for renewal of a Title V operation permit must be submitted 180 days prior to expiration. Since Title V FINAL Permit Revision No. 1050233-012-AV expires on December 31, 2004, the permit renewal application for the Polk Power Station must be submitted no later than July 5, 2004. This application package, consisting of the Department's *Application for Air Permit – Long Form* and all required supplemental facility and emission unit information, constitutes TEC's Title V permit renewal application for the Polk Power Station and is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C. As noted above, none of the PPS emission units are subject to the CAM Rule.

The following attachments are included as referenced in the permit:

A-1	Facility Plot Plan
A-2	Process Flow Diagrams
A-3	Precautions to Prevent Emissions of Unconfined Particulate Matter
A-4	List of Insignificant Activities
A-5	Identification of Applicable Requirements
A-6	Compliance Report and Plan
A-7	Verification of Risk Management Plan Submission to EPA
A-8	Fuel Analyses
A-9	Detailed Description of Control Equipment
A-10	Procedures for Startup and Shutdown
A-11	Alternative Methods of Operation
A-12	Acid Rain Certification of Representation
A-13	Acid Rain Part (Form No. 62-210.900(1)(a))
A-14	Requested Changes to Current Title V Air Operation Permit
A-15	Prior Generic Exemptions

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:
- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:
- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Tampa Electric Company**
2. Site Name: **Polk Power Station**
3. Facility Identification Number: **1050233**
4. Facility Location...:
   Street Address or Other Locator: **9995 State Route 37 South**
   City: **Mulberry** County: **Polk** Zip Code: **33860-0775**
5. Relocatable Facility? ☐ Yes ☒ No
6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: Raiza Calderon, Engineer, Environmental Affairs
2. Application Contact Mailing Address...
   Organization/Firm: **Tampa Electric Company**
   Street Address: **6499 U.S. Highway 41 North**
   City: **Apollo Beach** State: **FL** Zip Code: **33572-9200**
3. Application Contact Telephone Numbers...
   Telephone: **(813) 641-5261** ext. Fax: **(813) 641-5081**
4. Application Contact Email Address: rcalderon@tecoenergy.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Project Number(s):	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

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

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	260 megawatt (MW) combined cycle combustion turbine	N/A	N/A
003	120 million British thermal unit (MMBtu) per hour auxiliary boiler	N/A	N/A
004	Sulfuric acid plant	N/A	N/A
005	Solid fuel handling system	N/A	N/A
006	Solid fuel gasification system	N/A	N/A
007	Emergency generators	N/A	N/A
008	Heating units and general purpose internal combustion engines	N/A	N/A
009	Nominal 165 MW simple cycle gas turbine CTG-2	N/A	N/A
010	Nominal 165 MW simple cycle gas turbine CTG-3	N/A	N/A

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement N/A

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 Email Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility 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 requirements identified in this application to which the facility 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.

   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
   Mark J. Hornick, General Manager

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☒ 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.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Tampa Electric Company**
   Street Address: **P.O. Box 111**
   City: **Tampa** State: **FL** Zip Code: **33601-0111**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(813) 288-1111** ext.**39988** Fax: **(863) 428-5927**

5. Application Responsible Official Email Address: **mjhornick@tecoenergy.com**

6. Application Responsible Official Certification:

   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 plan(s) submitted with this application.

Mark J Hornick
Signature

04/21/04
Date

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: **FL** Zip Code: **32606**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 332-0444** ext. Fax: **(352) 332-6722**
4. Professional Engineer Email Address: **tdavis@ectinc.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) 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

(2) 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.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☒, 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.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, 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 ☐, 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.

(5) 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 ☐, 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.

Signature 4/15/04
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **402.45** North (km) **3,067.35**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **27/43/43** Longitude (DD/MM/SS) **81/59/23**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Mike Perkins, Environmental Coordinator**
2. Facility Contact Mailing Address... Organization/Firm: **Tampa Electric Company** Street Address: **P.O. Box 111** City: **Tampa** State: **FL** Zip Code: **33601-0111**
3. Facility Contact Telephone Numbers: Telephone: **(813) 228-1111** ext.**39109** Fax: **(863) 428-5927**
4. Facility Contact Email Address: **msperkins@tecoenergy.com**

Facility Primary Responsible Official

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 Email Address:

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

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NOX	**A**	**N**
SO2	**A**	**N**
CO	**A**	**N**
PM10	**A**	**N**
PM	**A**	**N**
SAM	**A**	**N**
VOC	**A**	**N**
PB	**B**	**N**
H114	**B**	**N**
H015	**B**	**N**
H021	**B**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps **N/A**

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

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) ☒ Attached, Document ID:**A-1** ☐ 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) ☒ Attached, Document ID:**A-2a to 2f** ☐ 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) ☒ Attached, Document ID:**A-3** ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications N/A

1. Area Map Showing Facility Location: ☐ Attached, Document ID:_____ ☐ Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification: ☐ Attached, Document ID:_____
3. Rule Applicability Analysis: ☐ Attached, Document ID:_____
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable

Additional Requirements for FESOP Applications N/A

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ 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: **A-4** ☐ 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: **A-5**
   ☐ 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: **A-6**
   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: **Additional Requirements Comment**
   ☐ Equipment/Activities On site 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: **A-7** ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID: ☒ Not Applicable

Additional Requirements Comment

Equipment/Activities regulated under Title IV :
Administration Building Air Conditioning Unit, 350 pounds charge of R22 refrigerant.

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:
260 MW combined cycle combustion turbine

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**4/10/96**	**49**	☒ Yes ☐ No

9. Package Unit: **N/A**
Manufacturer: **General Electric** Model Number: **7F**

10. Generator Nameplate Rating: **260 MW**

11. **Emissions Unit Comment: This unit is capable of firing syngas or No. 2 fuel oil.**

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Nitrogen dilutent injection and syngas water saturation for syngas-firing

Water injection for No. 2 fuel oil-firing

Control Device or Method Code(s): **028 (water injection)**

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: **1,765** million Btu/hr	
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 is 1,765 MMBtu/hr firing No. 2 fuel oil, and 1,755 MMBtu/hr firing syngas. Both rates are on a monthly average basis.

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: **CT-01**	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: **150** feet	7. Exit Diameter: **19.0** feet
8. Exit Temperature: **340** °F	9. Actual Volumetric Flow Rate: **1,290,000** 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... **N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... **N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Combustion turbine, syngas-firing**		
2. Source Classification Code (SCC): **2-01-009-99**	3. SCC Units: **million cubic feet burned (all gaseous fuels)**	
4. Maximum Hourly Rate: **9.24**	5. Maximum Annual Rate: **80,914.70**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **0.07**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **190**
10. Segment Comment: **Maximum hourly rate (Field 4), maximum annual rate (Field 5), and Btu/SCC unit value (Field 9) based on average fuel heat content of 190 Btu/cubic foot.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Combustion turbine, oil-firing.**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **Thousand gallons burned (all liquid fuels)**	
4. Maximum Hourly Rate: **12.71**	5. Maximum Annual Rate: **11,131.32**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **138.9**
10. Segment Comment: **Maximum hourly rate (Field 4), maximum annual rate (Field 5), and Btu/SCC unit value (Field 9) based on average fuel heat content of 138,900 Btu/gal. Maximum annual rate (Field 5) based on a maximum 10 percent capacity factor firing oil.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – CO			**EL**
2 – VOC			**EL**
3 – NOX	**028**		**EL**
4 – PM/PM10			**EL**
5 – SO2			**EL**
6 - PB			**EL**
7 – SAM			**EL**
8 – H015 (arsenic)			**EL**
9 – H021 (beryllium)			**EL**
10 – H114 (mercury)			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **99.0** lb/hour **430.1** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **99 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.** **Annual emission limit is based on a 10 percent annual capacity factor firing oil.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **40 ppmvd (oil-firing)**	4. Equivalent Allowable Emissions: **99** lb/hour **N/A** tons/year
5. Method of Compliance: **EPA Method 10**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

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: **25 ppmvd (syngas-firing)**	4. Equivalent Allowable Emissions: **98** lb/hour **430.1** tons/year
5. Method of Compliance: **EPA Method 10**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **32.0** lb/hour **38.5** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **32 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.** **Annual emission limit is based on a 10 percent annual capacity factor firing oil.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **0.028 lb/million Btu (oil-firing)**	4. Equivalent Allowable Emissions: **32** lb/hour **N/A** tons/year
5. Method of Compliance: **EPA Method 18**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

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: **0.0017 lb/million Btu (syngas-firing)**	4. Equivalent Allowable Emissions: **3** lb/hour **38.5** tons/year
5. Method of Compliance: **EPA Method 18**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **311** lb/hour **620** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **311 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.** **Annual emission limit is based on a 10 percent annual capacity factor firing oil.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **42 ppmvd (oil-firing)**	4. Equivalent Allowable Emissions: **311** lb/hour **N/A** tons/year
5. Method of Compliance: **NOX CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

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: **15 ppmvd (syngas-firing)**	4. Equivalent Allowable Emissions: **132** lb/hour **620** tons/year
5. Method of Compliance: **NOX CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition 2.H.1 of PSD Permit Modification PSD-FL-194F**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **17.0** lb/hour **74.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0** Reference **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 17 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 74.5 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **PM/PM10 emissions do no include sulfuric acid mist.** **Hourly emission limit is based on a 30-day rolling average.** **Annual emission limit is based on a 10 percent annual capacity factor firing oil.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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:
3. Allowable Emissions and Units: **0.009 lb/million Btu (oil-firing)**	4. Equivalent Allowable Emissions: **17** lb/hour **N/A** tons/year
5. Method of Compliance: **EPA Method 5B**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.013 lb/million Btu (syngas-firing)**	4. Equivalent Allowable Emissions: **17** lb/hour **74.5** tons/year
5. Method of Compliance: **None required (compliance with VE limit used as a surrogate)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **357** lb/hour **1,563.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **357 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 357 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 1,563.7 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **0.048 lb/million Btu (oil-firing)**	4. Equivalent Allowable Emissions: **92.2** lb/hour **N/A** tons/year
5. Method of Compliance: **Compliance may be determined from calculations based on the fuel analysis for sulfur content.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

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: **0.17 lb/million Btu (syngas-firing)**	4. Equivalent Allowable Emissions: **357** lb/hour **1,563.7** tons/year
5. Method of Compliance: **Compliance may be determined from calculations based on the fuel analysis for sulfur content.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **0.101** lb/hour **0.067** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **0.000053 lb/million Btu (oil-firing)**	4. Equivalent Allowable Emissions: **0.101** lb/hour **N/A** tons/year
5. Method of Compliance: **The initial compliance testing has been satisfied, and no further tests are required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

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: **0.00000241 lb/million Btu (syngas-firing)**	4. Equivalent Allowable Emissions: **0.0035** lb/hour **0.067** tons/year
5. Method of Compliance: **The initial compliance testing has been satisfied, and no further tests are required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **55.0** lb/hour **241** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **55 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Annual Emissions = 55 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb
Annual Emissions = 241 tons/year

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Hourly emission limit is based on a 30-day rolling average.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **55** lb/hour **241** tons/year
5. Method of Compliance: **The initial compliance testing has been satisfied, and no further tests are required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H015 (arsenic)**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **0.0006** lb/hour **0.019** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0.0006 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
9. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **0.0006** lb/hour **0.019** tons/year
5. Method of Compliance: **The initial compliance testing has been satisfied, and no further tests are required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H021 (beryllium)**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **0.0001** lb/hour **0.0029** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0.0001 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
10. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **0.0001** lb/hour **0.0029** tons/year
5. Method of Compliance: **The initial compliance testing has been satisfied, and no further tests are required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H114 (mercury)**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **0.0034** lb/hour **0.017** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0.0034 lb/hr** Reference: **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
11. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Hourly emission limit is based on a 30-day rolling average.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **0.0034** lb/hour **0.017** tons/year
5. Method of Compliance: **The initial compliance testing has been satisfied, and no further tests are required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.5. FINAL Permit Revision No. 1050233-012-AV**	

G. VISIBLE EMISSIONS INFORMATION

Complete 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**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
2. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Visible emissions will not exceed 10 percent opacity when firing syngas, and 20 percent opacity when firing fuel oil (Condition A.9. FINAL Permit Revision No. 1050233-012-AV).**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor **1** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermal Environmental** Model Number: **43B**	Serial Number: **43B-48910-282**
5. Installation Date: **01 Jan 1996**	6. Performance Specification Test Date: **26 Aug 1996**
6. Continuous Monitor Comment: **Required per 40 CFR Part 75 System includes one SO2 monitor with one identical backup monitor.**	

Continuous Monitoring System: Continuous Monitor **2** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **NOX**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermal Environmental** Model Number: **42D**	Serial Number: **42D-53124-294**
5. Installation Date: **01 Jan 1996**	6. Performance Specification Test Date: **26 Aug 1996**
7. Continuous Monitor Comment: **Required per 40 CFR Part 75 System includes one NOx monitor with one identical backup monitor.**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Siemens** Model Number: **Ultramat 5E**	Serial Number: **EN-029**
5. Installation Date: **01 Jan 1996**	6. Performance Specification Test Date: **26 Aug 1996**
7. Continuous Monitor Comment: **Required per 40 CFR Part 75 System includes one CO2 monitor with one identical backup monitor.**	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: **FLOW**	2. Pollutant(s): **N/A**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **United Sciences** Model Number: **Ultraflow 100**	Serial Number: **9401818**
5. Installation Date: **01 Jan 1996**	6. Performance Specification Test Date: **26 Aug 1996**
7. Continuous Monitor Comment: **Required per 40 CFR Part 75 System includes one flow monitor.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **VE**	2. Pollutant(s): **N/A**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermal Environmental** Model Number: **400B**	Serial Number: **400B-53687-B80**
5. Installation Date: **01 Jan 1996**	6. Performance Specification Test Date: **26 Aug 1996**
8. Continuous Monitor Comment: **Required per 40 CFR Part 75 System includes one opacity monitor.**	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 3/18/04 (syngas and oil)
   Test Date(s)/Pollutant(s) Tested: 2/5/04 CO, NO_x, SO_2 for syngas
   2/21/04 CO, SO_2, NO_x, PM for oil
   ☐ To be Submitted, Date (if known):_
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Air Construction Permit Applications **N/A**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: ☒ Not Applicable
3. Alternative Methods of Operation
   ☒ Attached, Document ID: **A-11** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☒ Certificate of Representation (EPA Form No. 7610-1)
      ☒ Copy Attached, Document ID: **A-12**
   ☒ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☒ Attached, Document ID: **A-13**
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [2] of [9]

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:
120 million Btu/hr auxiliary boiler

3. Emissions Unit Identification Number: **003**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**4/10/96**	**49**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **ABCO Industries, Inc.** Model Number: **9406**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:

This unit fires No. 2 fuel oil.

EMISSIONS UNIT INFORMATION

Section [2] of [9]

Emissions Unit Control Equipment N/A

1. Control Equipment/Method(s) Description:

Exhaust Gas Recirculation (EGR)—NO_x

2. Control Device or Method Code(s): **026**

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: **120 (HHV)** million Btu/hr	
4. Maximum Incineration Rate:	pounds/hr **N/A** tons/day
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**3,000*** hours/year
6. Operating Capacity/Schedule Comment:	

*** Maximum of 3,000 hours per year at 100 percent load (distillate fuel oil firing). The unit may operate in standby mode continuously for 8,760 hr/year.**

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: **AB-01**	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: **75** feet	7. Exit Diameter: **3.7** feet
8. Exit Temperature: **375** °F	9. Actual Volumetric Flow Rate: **32,240** 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... **N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... **N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **120 million Btu/hr auxiliary boiler firing No. 2 fuel oil.**		
2. Source Classification Code (SCC): **1-02-005-01**	3. SCC Units: **Thousand gallons burned (all liquid fuels)**	
4. Maximum Hourly Rate: **0.84**	5. Maximum Annual Rate: **3,089.42**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **138.9**
10. Segment Comment: **Maximum hourly rate (Field 4), maximum annual rate (Field 5), and Btu/SCC unit value (Field 9) based on average fuel heat content of 138,900 Btu/gal.** **Maximum annual rate (Field 5) based on 3,000 hr/yr of full operation and 5,760 hr/yr of standby operation.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX	**N/A**	**N/A**	**EL**
2 - SO2	**N/A**	**N/A**	**EL**
3 – PM/PM10	**N/A**	**N/A**	**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **12.0** lb/hour **18.0** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **12 lb/hr** Reference: **Condition B.11. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Nitrogen oxides expressed as NO2 shall not exceed 0.10 lb per million Btu heat input.

Annual Emission Rate = 0.1 lb/MMBtu x 120 MMBtu/hr x 3,000 hr/yr x ton/2,000 lb

= 18.0 tons/yr

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Operation shall not exceed 3,000 hours per year in non-standby mode. This emission unit may operate continuously (8,760 hours per year) in standby mode.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.10 lb/million Btu** **(30 day rolling average)**	4. Equivalent Allowable Emissions: **12.0** lb/hour **18.0** tons/year
5. Method of Compliance: **EPA Methods 7, 7A, 7C, 7D, or 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60.44b(a) and PSD-FL-194(A)**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **0.0**

3. Potential Emissions: **96** lb/hour **9** tons/year	4. Synthetically Limited? ☒ Yes ☐ No

5. Range of Estimated Fugitive Emissions (as applicable): **N/A**
to tons/year

6. Emission Factor: **0.8 lb/million Btu heat input** Reference: **Condition B.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

$$\text{Annual Emission Rate} \frac{840\ \text{gal}}{\text{hr}} \times \frac{7.1\ \text{lb}}{\text{gal}} \times \frac{3{,}000\ \text{hr}}{\text{yr}} \times \frac{0.05\ \text{lbs}}{100\ \text{lb}} \times \frac{2\ \text{lb SO}_2}{1\ \text{lb S}} \times \frac{\text{ton}}{2{,}000\ \text{lb}} = 9\ \text{tons/yr}$$

(in non-standby mode)

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Operation shall not exceed 3,000 hours per year in non-standby mode. This emission unit may operate continuously (8,760 hours per year) in standby mode. Permit condition 8.7 limits the sulfur content of the fuel to 0.05 percent by weight.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **98.1 lb/hr** **(30 day rolling average)**	4. Equivalent Allowable Emissions: **96.0** lb/hour **9.0** tons/year
5. Method of Compliance: **Use of distillate fuel oil containing no more than 0.05 weight percent sulfur. Distillate fuel oil sulfur content monitored using applicable 40 CFR Part 75 Appendix D**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60.42b(a) & (j)**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10**	2. Total Percent Efficiency of Control: **0.0**
3. Potential Emissions: **12.0** lb/hour **18.0** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **0.10 lb/hr** Reference: **Condition B.9. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emission Rate = 0.1 lb/MMBtu x 120 MMBtu/hr x 3,000 hr/yr x ton/2,000 lb = 18.0 tons/yr (in non-standby mode)**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **Operation shall not exceed 3,000 hours per year in non-standby mode. This emission unit may operate continuously (8,760 hours per year) in standby mode.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.10 lb/million Btu heat input** **(equivalent to 43 ng/J)**	5. Equivalent Allowable Emissions: **12.0** lb/hour **18.0** tons/year
5. Method of Compliance: **EPA Methods 5 or 17**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60.43b(b)**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20% (6 minute average)** Exceptional Conditions: **27 %** Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **EPA Reference Method 9 annually.**	
5. Visible Emissions Comment: **40 CFR 60.43b(f) & PSD-FL-194(A)**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: **N/A** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment: *** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided best operation practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized, but in no case exceed 2 hours in any 24 hour period for other reasons unless authorized by DEP for longer duration.**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: **EM**	2. Pollutant(s): **NOX**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermal Environmental** Model Number: **42D**	Serial Number: **42D-53135-294**
5. Installation Date: **01 Jan 96**	6. Performance Specification Test Date: **28 May 96**
6. Continuous Monitor Comment: **Required per 40 CFR 60. System includes one NOx monitor.**	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Siemens** Model Number: **5E**	Serial Number: **EN-030**
5. Installation Date: **01 Jan 96**	6. Performance Specification Test Date: **28 May 96**
7. Continuous Monitor Comment: **Required by 40 CFR Part 60. System includes one CO2 monitor.**	

EMISSIONS UNIT INFORMATION
Section [2] of [9]

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **VE**	2. Pollutant(s): **N/A**
3. CMS Requirement: ☒ Rule ☐ Other	
4. Monitor Information... Manufacturer: **Thermal Environmental** Model Number: **400B** Serial Number: **400B-53687**	
5. Installation Date: **01 Jan 96**	6. Performance Specification Test Date: **28 May 96**
8. Continuous Monitor Comment: **Required by 40 CFR Part 60. System includes one opacity monitor.**	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☐ Attached, Document ID: **N/A** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: ___ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 3/15/04
   Test Date(s)/Pollutant(s) Tested: 3/3/04 SO2, NO_2, PM
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☐ Copy Attached, Document ID:_____
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☒ Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [3] of [9]

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:
Sulfuric Acid Plant

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

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**4/10/96**	**49**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **Field erected to TEC specifications** Model Number: **N/A**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Double contact process of the sulfuric acid plant results in low SO2 emissions.

Mist eliminator (152) used to control SAM emissions.

2. Control Device or Method Code(s): **044 (double contact process), 152 (mist eliminator)**

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: **77,640 tons/year of 100 percent sulfuric acid**	
3. Maximum Heat Input Rate: million Btu/hr	**N/A**
4. Maximum Incineration Rate: pounds/hr tons/day	**N/A**
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 7 days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

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: **AP-01**	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: **199** feet	7. Exit Diameter: **2.5** feet
8. Exit Temperature: **180** °F	9. Actual Volumetric Flow Rate: **17,660** 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... **N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... **N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Two other emission points exist within the sulfuric acid plant. The propane-fired H2S-to-SO2 conversion furnace vents directly to the atmosphere during acid plant warmup (15 MMBtu/hr maximum heat input rating during warmup; vented to atmosphere only when process gas is not being treated). Also, a propane-fired SO2-to-SO3 converter preheater (9 MMBtu/hr maximum heat input) produces a noncontact exhaust stream that vents directly to the atmosphere.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Sulfuric acid production**		
2. Source Classification Code (SCC): **3-01-023-99**	3. SCC Units: **Tons produced or manufactured**	
4. Maximum Hourly Rate: **8.90**	5. Maximum Annual Rate: **77,640.0**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment: **Condition C.1. FINAL Permit Revision No. 1050233-012-AV**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – SO2	**044**		**EL**
2 – SAM	**152**		**EL**
3 - NOX			**NS**
4 - PM			**NS**
5 – PM10			**NS**
6 - CO			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **35.6** lb/hour **155.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **4.0 pounds per ton of 100 percent acid produced** Reference: **Condition C.6. Final Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Hourly emission rate = 4.0 lb SO2/ton acid x 8.9 tons acid/hr = 35.6 lb/hr** **Annual emission rate = 4.0 lb SO2/ton acid x 77,640 tons acid/yr = 155.3 ton/yr**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **N/A**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **4.0 lb/ton of 100% acid produced** **(30 day rolling average)**	4. Equivalent Allowable Emissions: **35.6** lb/hour **155.3** tons/year
5. Method of Compliance: **EPA Method 6C**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.402(2)(b), F.A.C.** **Condition C.6. Final Permit Revision No. 1050233-012-AV**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **1.3** lb/hour **5.82** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
5. Emission Factor: **0.15 pound per ton of 100 percent acid produced** Reference: **Condition C.7. Final Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Hourly emission rate = 0.15 lb SAM/ton acid x 8.9 tons acid/hr = 1.3 lb/hr** **Annual emission rate = 0.15 lb SAM/ton acid x 77,640 tons acid/yr = 5.82 ton/yr**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **N/A**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.15 lb/ton of 100% acid produced**	6. Equivalent Allowable Emissions: **1.3** lb/hour **5.82** tons/year
5. Method of Compliance: **EPA Method 8; Condition C.14. Final Permit Revision No. 1050233-012-AV (minimum sample volume shall be 40 dscf)**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.402(2)(c), F.A.C.**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9 annually.**	
5. Visible Emissions Comment: **Rule 62-296.402(2)(a), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: **N/A** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment: *** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided best operation practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized, but in no case exceed 2 hours in any 24 hour period for other reasons unless authorized by DEP for longer duration.**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor **1** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
6. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **2** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID:___ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ___
   Test Date(s)/Pollutant(s) Tested: _____

   ☒ Previously Submitted, Date: 3/18/04
   Test Date(s)/Pollutant(s) Tested: 3/3/04 SO2, SAM

   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____

   ☐ 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
   ☐ Attached, Document ID: _____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [3] of [9]

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application **N/A**
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment

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:
Solid Fuel Handling System

3. Emissions Unit Identification Number: **005**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit
A	**N/A**		**49**	☐ Yes ☒ No

9. Package Unit: **N/A**
Manufacturer: **N/A** Model Number: **N/A**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:

This emissions unit includes all solid fuel handling facilities, including unloading, storage, conveyor transfers, and grinding.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Silo No. 1 bin vent baghouse
Silo No 2 bin vent baghouse
Silo feed to belt conveyor baghouse
Belt conveyor to grinding tower daybin transfer baghouse

2. Control Device or Method Code(s): **18**

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: million Btu/hr	**N/A**
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:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type N/A

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: 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:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Solid fuel unloading, storage, conveyor transfer, and grinding**		
2. Source Classification Code (SCC): **3-05-104-03**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **350.00**	5. Maximum Annual Rate: **952,020.00**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – PM	**018**		**NS**
2 – PM10	**018**		**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **N/A** lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor **N/A** Reference:	7. Emissions Method Code: **N/A**
8. Calculation of Emissions: **N/A**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **N/A**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **N/A**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year
5. Method of Compliance: **Opacity used as surrogate for particulate matter emissions.**	
6. Allowable Emissions Comment (Description of Operating Method): **N/A**	

G. VISIBLE EMISSIONS INFORMATION

Complete 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: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9 annually.**	
5. Visible Emissions Comment: **Condition D.3. FINAL Permit Revision No. 1050233-012-AV PSD-FL-194(A)**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor **1** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
4. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **2** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
5. Continuous Monitor Comment:	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 2/14/03
   Test Date(s)/Pollutant(s) Tested: 2/12/03 VE
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application **N/A**
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment

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:
Solid Fuel Gasification System

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

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	49	☐ Yes ☒ No

9. Package Unit: **N/A**
Manufacturer: **N/A** Model Number: **N/A**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:
This system converts solid fuel (coal or coal blends of up to 60 percent petroleum coke and 40 percent bituminous coal) into syngas for the purpose of electric generation.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Flare (emergencies and startup/shutdown)

2. Control Device or Method Code(s): **23 (flare)**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	**2,325 ton/day on a dry basis**
2. Maximum Production Rate: **N/A**	
3. Maximum Heat Input Rate: million Btu/hr **N/A**	
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:

The solid fuels consist of coal or coal/petroleum coke blends containing a maximum of 60% petroleum coke by weight. The maximum input of solid fuels shall not exceed 2,325 tons per day on a dry basis, and the maximum weight of petroleum coke blended shall not exceed 1,395 tons per day on a dry basis. The sulfur content of the blended fuel shall not exceed 3.5% by weight. (Condition E.1. FINAL Permit Revision No. 1050233-012-AV).

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type N/A

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: 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:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Solid fuel gasification**		
2. Source Classification Code (SCC): **3-10-999-99**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **952,020**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment: **Maximum daily rate shall not exceed 2,325 tons on a dry basis, and the blended petroleum coke shall not exceed 1,395 tons per day on a dry basis.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit N/A

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions N/A

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor Reference:	7. Emissions Method Code:
8. Calculation of Emissions:	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **N/A**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1 **N/A**

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):	

G. VISIBLE EMISSIONS INFORMATION

Complete 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 N/A

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor **1** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
4. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **2** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
5. Continuous Monitor Comment:	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☐ Attached, Document ID: **N/A** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: **A-14**
   Test Date(s)/Pollutant(s) Tested: _____

   ☒ Previously Submitted, Date: 2/14/03
   Test Date(s)/Pollutant(s) Tested: 2/12/03 VE

   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____

   ☐ 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
   ☐ Attached, Document ID: _____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [5] of [9]

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment N/A

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:
Emergency generators

3. Emissions Unit Identification Number: **007**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	49	☐ Yes ☒ No

9. Package Unit: **N/A**
Manufacturer: **N/A** Model Number: **N/A**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:
This emissions unit consists of one or more emergency generators having a total aggregrate fuel consumption of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

Emissions Unit Control Equipment N/A

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s): **N/A**

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: million Btu/hr **N/A**
4. Maximum Incineration Rate: pounds/hr **N/A** tons/day
5. Requested Maximum Operating Schedule: **N/A** hours/day days/week weeks/year hours/year
6. Operating Capacity/Schedule Comment: **N/A**

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1 **N/A**

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit N/A

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions N/A

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor Reference:	7. Emissions Method Code:
8. Calculation of Emissions:	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

G. VISIBLE EMISSIONS INFORMATION

Complete 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 **N/A**

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2 **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
4. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 2 **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
5. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated **N/A**

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)
   ☐ Attached, Document ID: ☐ 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)
   ☐ Attached, Document ID: ☐ 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)
   ☐ Attached, Document ID: ☐ Previously Submitted, Date _____

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)
   ☐ Attached, Document ID: ☐ Previously Submitted, Date _____
   ☐ Not Applicable

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)
   ☐ Attached, Document ID: ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID:
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment N/A

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:
Heating units and general purpose internal combustion engines

3. Emissions Unit Identification Number: **008**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	**49**	☐ Yes ☒ No

9. Package Unit: **N/A**
Manufacturer: **N/A** Model Number: **N/A**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:
This emissions unit consists of one or more heating units and general purpose internal combustion engines having a total aggregrate fuel consumption of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

Emissions Unit Control Equipment N/A

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s): **N/A**

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: million Btu/hr **N/A**
4. Maximum Incineration Rate: pounds/hr **N/A** tons/day
5. Requested Maximum Operating Schedule: **N/A** hours/day days/week weeks/year hours/year
6. Operating Capacity/Schedule Comment: **N/A**

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: **N/A**	2. Emission Point Type Code: **N/A**	
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: **N/A**	6. Stack Height: **N/A** feet	7. Exit Diameter: **N/A** feet
8. Exit Temperature: **N/A** °F	9. Actual Volumetric Flow Rate: **N/A** 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... **N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... **N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **N/A**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Heating units and general purpose internal combustion engines**		
2. Source Classification Code (SCC): **N/A**	3. SCC Units: **N/A**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **N/A**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit N/A

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions **N/A**

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor Reference:	7. Emissions Method Code:
8. Calculation of Emissions:	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

G. VISIBLE EMISSIONS INFORMATION

Complete 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** **N/A**

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor **1** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
4. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **2** of **2** **N/A**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
5. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated N/A

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)
   ☐ Attached, Document ID: ☐ 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)
   ☐ Attached, Document ID: ☐ 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)
   ☐ Attached, Document ID: ☐ Previously Submitted, Date _____

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)
   ☐ Attached, Document ID: ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID:
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment N/A

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:
Nominal 165 MW simple cycle combustion turbine

3. Emissions Unit Identification Number: **009**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**6/29/00**	**49**	☒ Yes ☐ No

9. Package Unit:
Manufacturer: **General Electric** Model Number: **PG7241(FA)**

10. Generator Nameplate Rating: **175.8 MW**

11. Emissions Unit Comment:

This unit is capable of firing natural gas or No. 2 fuel oil.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Dry low-NOx combustors (natural gas firing)
Water injection (distillate fuel oil firing)

2. Control Device or Method Code(s): **24 (dry low-NOx), 28 (water injection)**

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: **1,800 (LHV)** million Btu/hr	
4. Maximum Incineration Rate:	pounds/hr **N/A** tons/day
5. Requested Maximum Operating Schedule:	hours/day — days/week weeks/year — **5,130*** hours/year
6. Operating Capacity/Schedule Comment:	

Maximum heat rate is lower heating value (LHV) at 100 percent load, 59 °F, fuel-oil firing operating conditions. Heat input will vary with load, fuel type, and ambient temperature.

*** Maximum of 4,380 hours per year (natural gas firing) and 750 hours per year (distillate fuel oil firing).**

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: **CT02**	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: **114** feet	7. Exit Diameter: **18** feet
8. Exit Temperature: **1,117** °F	9. Actual Volumetric Flow Rate: **2,377,044** acfm	10. Water Vapor: % **N/A**
11. Maximum Dry Standard Flow Rate: dscfm **N/A**	12. Nonstack Emission Point Height: feet **N/A**	
13. Emission Point UTM Coordinates... **N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... **N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack temperature and flow rate are at 100 percent load, 59°F, and natural gas-firing operating conditions. Stack temperature and flow rate will vary with load, fuel type, and ambient temperature.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Combustion turbine fired with pipeline quality natural gas.**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **1.848**	5. Maximum Annual Rate: **8,094.2**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: *	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **923**
10. Segment Comment: **Fuel heat content (field 9) represents lower heating value (LHV).** ***Sulfur content of fuel shall be less than 2 grains per 100 standard cubic foot.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Combustion turbine fired with distillate fuel oil.**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **14.243**	5. Maximum Annual Rate: **10,682.3**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **.05**	8. Maximum % Ash: **.01**	9. Million Btu per SCC Unit: **134**
10. Segment Comment: **Fuel heat content (field 9) represents lower heating value (LHV).**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX	**024, 028**		**EL**
2 - CO			**EL**
3 – VOC			**EL**
4 – SO2			**EL**
5 – PM			**NS**
6 – PM10			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **319.0** lb/hour **270.3** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **319.0 lb/hr** Reference: **Condition F.4. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 68.8 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 319 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **10.5 ppmvd @ 15% O2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **68.8** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **NOx CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.4. FINAL Permit Revision No. 1050233-012-AV (BACT)** **Unit is also subject to less stringent NOx limits of 40 CFR Part 60, Subpart GG (NSPS).** **Limit applicable for natural gas-firing.**	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **42 ppmvd @ 15% O2** **(3-hour average)**	4. Equivalent Allowable Emissions: **319** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **NOx CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.4. FINAL Permit Revision No. 1050233-012-AV (BACT)** **Unit is also subject to less stringent NOx limits of 40 CFR Part 60, Subpart GG (NSPS).** **Limit applicable for distillate fuel oil-firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **319 lb/hr (at ISO conditions)**	4. Equivalent Allowable Emissions: **319** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **EPA Reference Methods 7E and 19 annually. Annual NOx CEMS RATA may be substituted for the annual compliance test. Annual testing only required if distillate fuel oil is used for more than 400 hours in the preceding 12-month period.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.4. FINAL Permit Revision No. 1050233-012-AV (BACT) Unit is also subject to less stringent NOx limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil-firing.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **65.0** lb/hour **107.6** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **65.0 LB/HR** Reference: **Condition F.8. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 38.0 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 65.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **12 ppmvd**	5. Equivalent Allowable Emissions: **38.0** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **EPA Reference Methods 10 annually. Annual testing only required if distillate fuel oil is used for more than 400 hours in the preceding 12-month period.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.8. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for natural gas-firing.**	

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: **20 ppmvd (at ISO conditions)**	4. Equivalent Allowable Emissions: **65.0** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **EPA Reference Methods 10 annually. Annual testing only required if distillate fuel oil is used for more than 400 hours in the preceding 12-month period.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.8. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for distillate oil-firing.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **7.0** lb/hour **8.8** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **7.0 lb/hr** Reference: **Condition F.7. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 2.8 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 7.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **1.4 ppmvw**	6. Equivalent Allowable Emissions: **2.8** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Compliance with CO emission limit serves as surrogate.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.7. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for natural gas-firing.**	

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: **3.5 ppmvw (at ISO conditions)**	4. Equivalent Allowable Emissions: **7** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Compliance with CO emission limit serves as surrogate.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.7. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for distillate oil-firing.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **98.1** lb/hour **56.9** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **98.1 lb/hr** Reference: **Condition F.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 9.2 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 98.1 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **9.2 lb/hr (at ISO conditions)**	7. Equivalent Allowable Emissions: **9.2** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Use of pipeline quality natural gas (sulfur content less than 2 grains per 100 standard cubic foot). Natural gas sulfur content monitored using applicable 40 CFR Part 75**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.5. FINAL Permit Revision No. 1050233-012-AV Limit applicable for natural gas-firing.**	

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: **98.1 lb/hr (at ISO conditions)**	4. Equivalent Allowable Emissions: **98.1** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Use of distillate fuel oil containing no more than 0.05 weight percent sulfur. Distillate fuel oil sulfur content monitored using applicable 40 CFR Part 75 Appendix D**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.5. FINAL Permit Revision No. 1050233-012-AV Limit applicable for distillate fuel oil-firing.**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9 annually.**	
5. Visible Emissions Comment: **PSD-FL-263**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment: *** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided best operation practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed 2 hours in any 24 hour period for other reasons unless authorized by DEP for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open). Condition F.7. FINAL Permit Revision No. 1050233-012-AV**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: **EM**	2. Pollutant(s): **NOX**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermal Environmental Instruments** Model Number: **42C**	Serial Number: **42C-64578-344**
5. Installation Date: **6/25/2000**	6. Performance Specification Test Date: **9/6/2000**
6. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program).**	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Siemens** Model Number: **Ultramat 6**	Serial Number: **F-NR.N1-LN-0396**
5. Installation Date: **6/25/2000**	6. Performance Specification Test Date: **9/6/2000**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program).**	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 3/24/03 (natural gas), 8/1/03 (oil)
   Test Date(s)/Pollutant(s) Tested: 2/12/03 CO, NO_x, SO2, VE (natural gas)
   5/18/03 CO, NO_x, SO2, VE (oil)
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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.

EMISSIONS UNIT INFORMATION
Section [8] of [9]

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☒ Attached, Document ID: **A-11** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☒ Certificate of Representation (EPA Form No. 7610-1)
      ☒ Copy Attached, Document ID: **A-12**
   ☒ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☒ Attached, Document ID: **A-13**
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [9] of [9]

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:
Nominal 165 MW simple cycle combustion turbine

3. Emissions Unit Identification Number: **010**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**6/29/00**	**49**	☒ Yes ☐ No

9. Package Unit:
Manufacturer: **General Electric** Model Number: **PG7241(FA)**

10. Generator Nameplate Rating: **175.8 MW**

11. Emissions Unit Comment:

This unit is capable of firing natural gas or No. 2 fuel oil.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Dry low-NOx combustors (natural gas firing)
Water injection (distillate fuel oil firing)

2. Control Device or Method Code(s): **24 (dry low-NOx), 28 (water injection)**

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: **1,800 (LHV)** million Btu/hr	
4. Maximum Incineration Rate:	pounds/hr **N/A** tons/day
5. Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/year	**5,130*** hours/year
6. Operating Capacity/Schedule Comment:	

Maximum heat rate is lower heating value (LHV) at 100 percent load, 59 °F, fuel-oil firing operating conditions. Heat input will vary with load, fuel type, and ambient temperature.

*** Maximum of 4,380 hours per year (natural gas firing) and 750 hours per year (distillate fuel oil firing).**

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: **CT03**	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: **114** feet	7. Exit Diameter: **18** feet
8. Exit Temperature: **1,117** °F	9. Actual Volumetric Flow Rate: **2,377,044** acfm	10. Water Vapor: % **N/A**
11. Maximum Dry Standard Flow Rate: dscfm **N/A**	12. Nonstack Emission Point Height: feet **N/A**	
13. Emission Point UTM Coordinates... **N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... **N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack temperature and flow rate are at 100 percent load, 59°F, and natural gas-firing operating conditions. Stack temperature and flow rate will vary with load, fuel type, and ambient temperature.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Combustion turbine fired with pipeline quality natural gas.**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million Cubic Feet Burned (all gaseous fuels)**	
4. Maximum Hourly Rate: **1.848**	5. Maximum Annual Rate: **8,094.2**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: *	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **923**
10. Segment Comment: **Fuel heat content (field 9) represents lower heating value (LHV).** ***Sulfur content of fuel shall be less than 2 grains per 100 standard cubic foot.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Combustion turbine fired with distillate fuel oil.**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **Thousand Gallons Burned (all liquid fuels)**	
4. Maximum Hourly Rate: **14.243**	5. Maximum Annual Rate: **10,682.3**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **.05**	8. Maximum % Ash: **.01**	9. Million Btu per SCC Unit: **134**
10. Segment Comment: **Fuel heat content (field 9) represents lower heating value (LHV).**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX	**024, 028**		**EL**
2 - CO			**EL**
3 – VOC			**EL**
4 – SO2			**EL**
5 – PM			**NS**
6 – PM10			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **319.0** lb/hour **270.3** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **319.0 lb/hr** Reference: **Condition F.4. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 68.8 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 319 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **10.5 ppmvd @ 15% O2** **(24-hour block average)**	4. Equivalent Allowable Emissions: **68.8** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **NOx CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.4. FINAL Permit Revision No. 1050233-012-AV (BACT)** **Unit is also subject to less stringent NOx limits of 40 CFR Part 60, Subpart GG (NSPS).** **Limit applicable for natural gas-firing.**	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **42 ppmvd @ 15% O2** **(3-hour average)**	4. Equivalent Allowable Emissions: **319** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **NOx CEMS**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.4. FINAL Permit Revision No. 1050233-012-AV (BACT)** **Unit is also subject to less stringent NOx limits of 40 CFR Part 60, Subpart GG (NSPS).** **Limit applicable for distillate fuel oil-firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **319 lb/hr (at ISO conditions)**	4. Equivalent Allowable Emissions: **319** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **EPA Reference Methods 7E and 19 annually. Annual NOx CEMS RATA may be substituted for the annual compliance test. Annual testing only required if distillate fuel oil is used for more than 400 hours in the preceding 12-month period.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.4. FINAL Permit Revision No. 1050233-012-AV (BACT) Unit is also subject to less stringent NOx limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil-firing.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **65.0** lb/hour **107.6** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **65.0 LB/HR** Reference: **Condition F.8. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 38.0 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 65.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **12 ppmvd**	5. Equivalent Allowable Emissions: **38.0** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **EPA Reference Methods 10 annually. Annual testing only required if distillate fuel oil is used for more than 400 hours in the preceding 12-month period.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.8. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for natural gas-firing.**	

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: **20 ppmvd (at ISO conditions)**	4. Equivalent Allowable Emissions: **65.0** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **EPA Reference Methods 10 annually. Annual testing only required if distillate fuel oil is used for more than 400 hours in the preceding 12-month period.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.8. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for distillate oil-firing.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **7.0** lb/hour **8.8** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **7.0 lb/hr** Reference: **Condition F.7. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 2.8 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 7.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **1.4 ppmvw**	6. Equivalent Allowable Emissions: **2.8** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Compliance with CO emission limit serves as surrogate.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.7. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for natural gas-firing.**	

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: **3.5 ppmvw (at ISO conditions)**	4. Equivalent Allowable Emissions: **7** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Compliance with CO emission limit serves as surrogate.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.7. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for distillate oil-firing.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **98.1** lb/hour **56.9** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **N/A** to tons/year	
6. Emission Factor: **98.1 lb/hr** Reference: **Condition F.5. FINAL Permit Revision No. 1050233-012-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 9.2 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 319.0 lb/hr and 98.1 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete 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: **9.2 lb/hr (at ISO conditions)**	7. Equivalent Allowable Emissions: **9.2** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Use of pipeline quality natural gas (sulfur content less than 2 grains per 100 standard cubic foot). Natural gas sulfur content monitored using applicable 40 CFR Part 75**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.5. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for natural gas-firing.**	

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: **98.1 lb/hr (at ISO conditions)**	4. Equivalent Allowable Emissions: **98.1** lb/hour **N/A** tons/year **(at ISO conditions)**
5. Method of Compliance: **Use of distillate fuel oil containing no more than 0.05 weight percent sulfur. Distillate fuel oil sulfur content monitored using applicable 40 CFR Part 75 Appendix D**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition F.5. FINAL Permit Revision No. 1050233-012-AV** **Limit applicable for distillate fuel oil-firing.**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9 annually.**	
5. Visible Emissions Comment: **PSD-FL-263**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment: *** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided best operation practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed 2 hours in any 24 hour period for other reasons unless authorized by DEP for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open). Condition F.7. FINAL Permit Revision No. 1050233-012-AV**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: **EM**	2. Pollutant(s): **NOX**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermal Environmental Instruments** Model Number: **42C**	Serial Number: **42C-64578-344**
5. Installation Date: **6/25/2000**	6. Performance Specification Test Date: **9/6/2000**
6. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program).**	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Siemens** Model Number: **Ultramat 6**	Serial Number: **F-NR.N1-LN-0396**
5. Installation Date: **6/25/2000**	6. Performance Specification Test Date: **9/6/2000**
7. Continuous Monitor Comment: **Required by 40 CFR Part 75 (Acid Rain Program).**	

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)
   ☒ Attached, Document ID: **A-2** ☐ 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)
   ☒ Attached, Document ID: **A-8** ☐ 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)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

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)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____
   ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 8/6/03 (natural gas and oil)
   Test Date(s)/Pollutant(s) Tested: 5/25/03 SO2, NO_x, CO, VE (natural gas)
   5/24/03 SO2, NO_x, CO, VE (oil)
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ 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
   ☐ Attached, Document ID: _____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [9] of [9]

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☒ Attached, Document ID: **A-11** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☒ Copy Attached, Document ID: **A-12**
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☒ Attached, Document ID: **A-13**
     - ☐ Previously Submitted, Date: _____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID: _____
     - ☐ Previously Submitted, Date: _____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID: _____
     - ☐ Previously Submitted, Date: _____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID: _____
     - ☐ Previously Submitted, Date: _____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID: _____
     - ☐ Previously Submitted, Date: _____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID: _____
     - ☐ Previously Submitted, Date: _____
   - ☐ Not Applicable

EMISSIONS UNIT INFORMATION
Section [9] of [9]

Additional Requirements Comment

Attachments

A-1	Facility Plot Plan
A-2	Process Flow Diagrams
A-3	Precautions to Prevent Emissions of Unconfined Particulate Matter
A-4	List of Insignificant Activities
A-5	Identification of Applicable Requirements
A-6	Compliance Report and Plan
A-7	Verification of Risk Management Plan Submission to EPA
A-8	Fuel Analyses
A-9	Detailed Description of Control Equipment
A-10	Procedures for Startup and Shutdown
A-11	Alternative Methods of Operation
A-12	Acid Rain Certification of Representation
A-13	Acid Rain Part (Form No. 62-210.900(1)(a))
A-14	Requested Changes to Current Title V Permit
A-15	Prior Generic Exemptions

ATTACHMENT A-1—
FACILITY PLOT PLAN

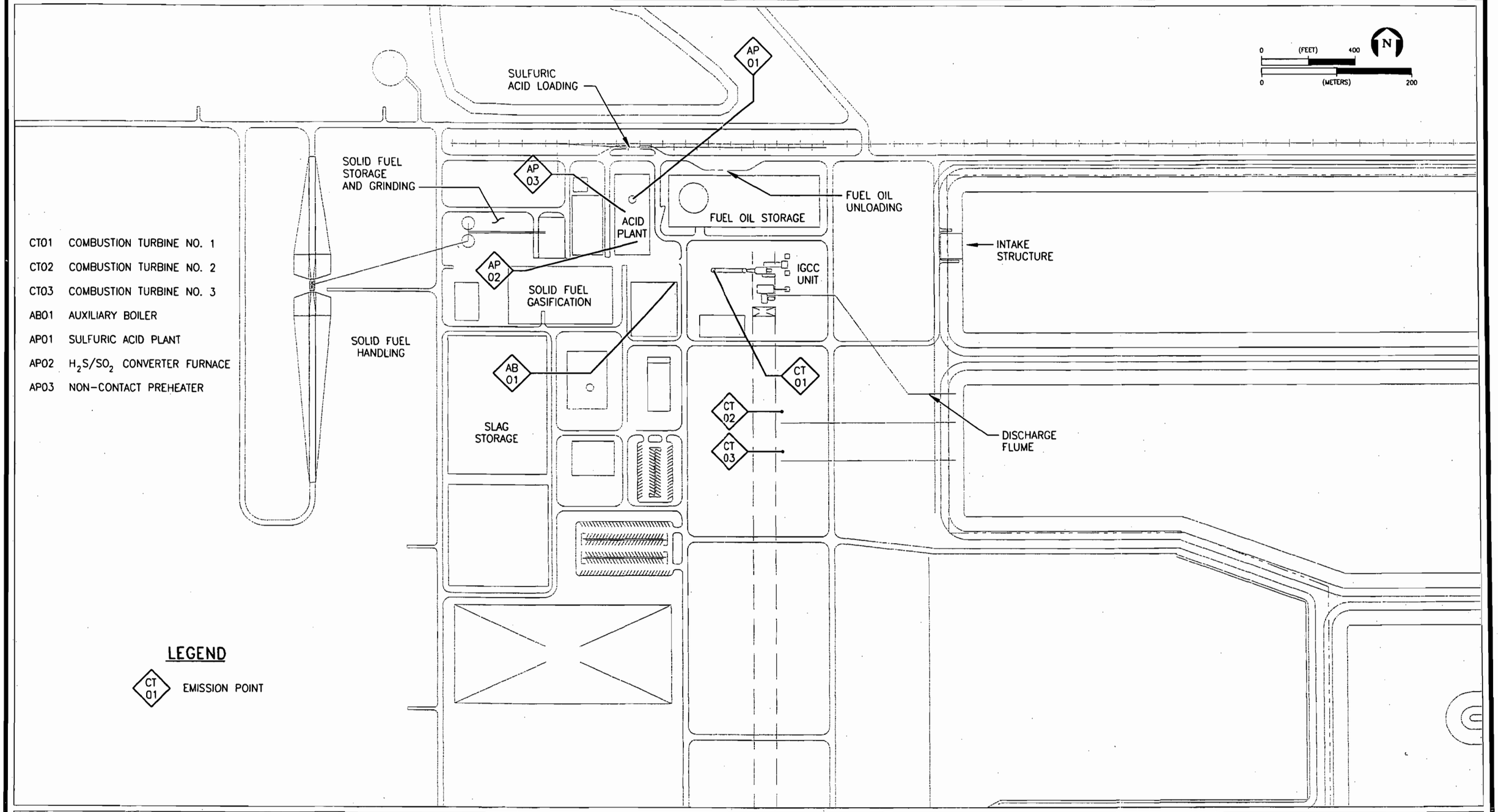

FIGURE 2-4.

POLK POWER STATION PLOT PLAN

Source: BECHTEL, 1994; ECT, 1999.

TECO
TAMPA ELECTRIC

ATTACHMENT A-2—
PROCESS FLOW DIAGRAMS

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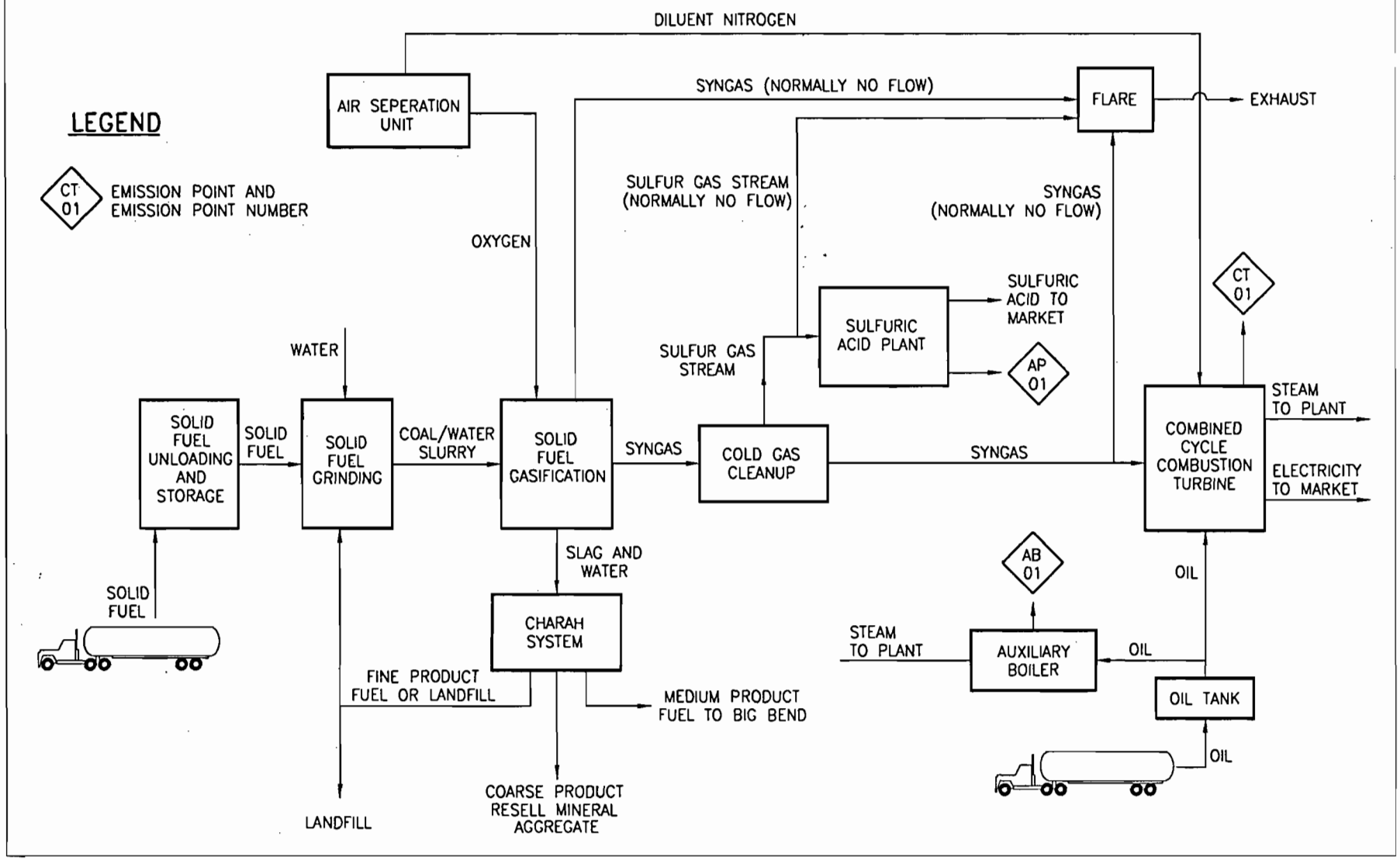

A-2a.

FACILITY-WIDE PROCESS SCHEMATIC DIAGRAM

Source: ECT, 2004.

TAMPA ELECTRIC

A TECO ENERGY COMPANY

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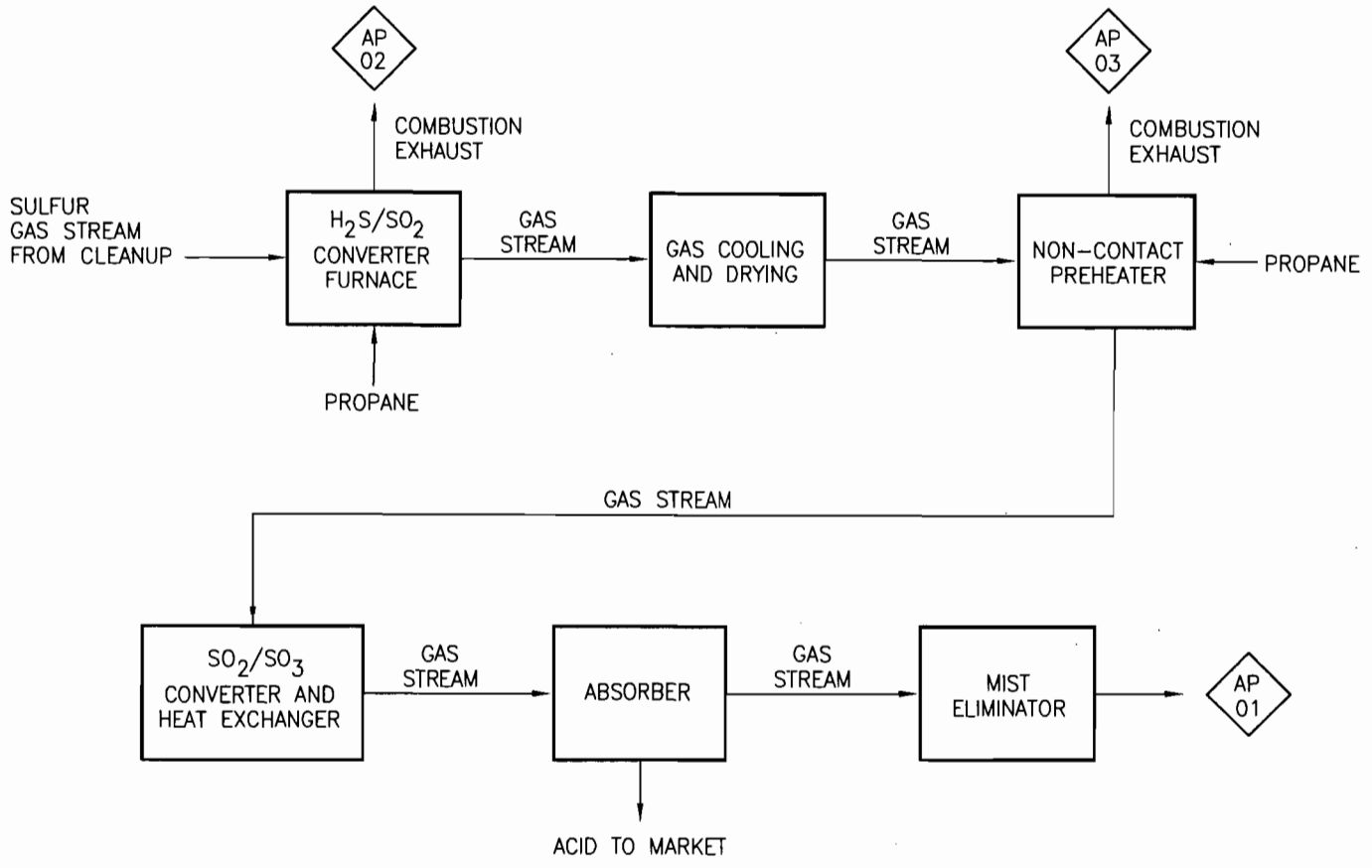

LEGEND

AP 01 EMISSION POINT

A-2b.

SULFURIC ACID PLANT: PROCESS SCHEMATIC DIAGRAM

Source: ECT, 2004.

TAMPA ELECTRIC

A TECO ENERGY COMPANY

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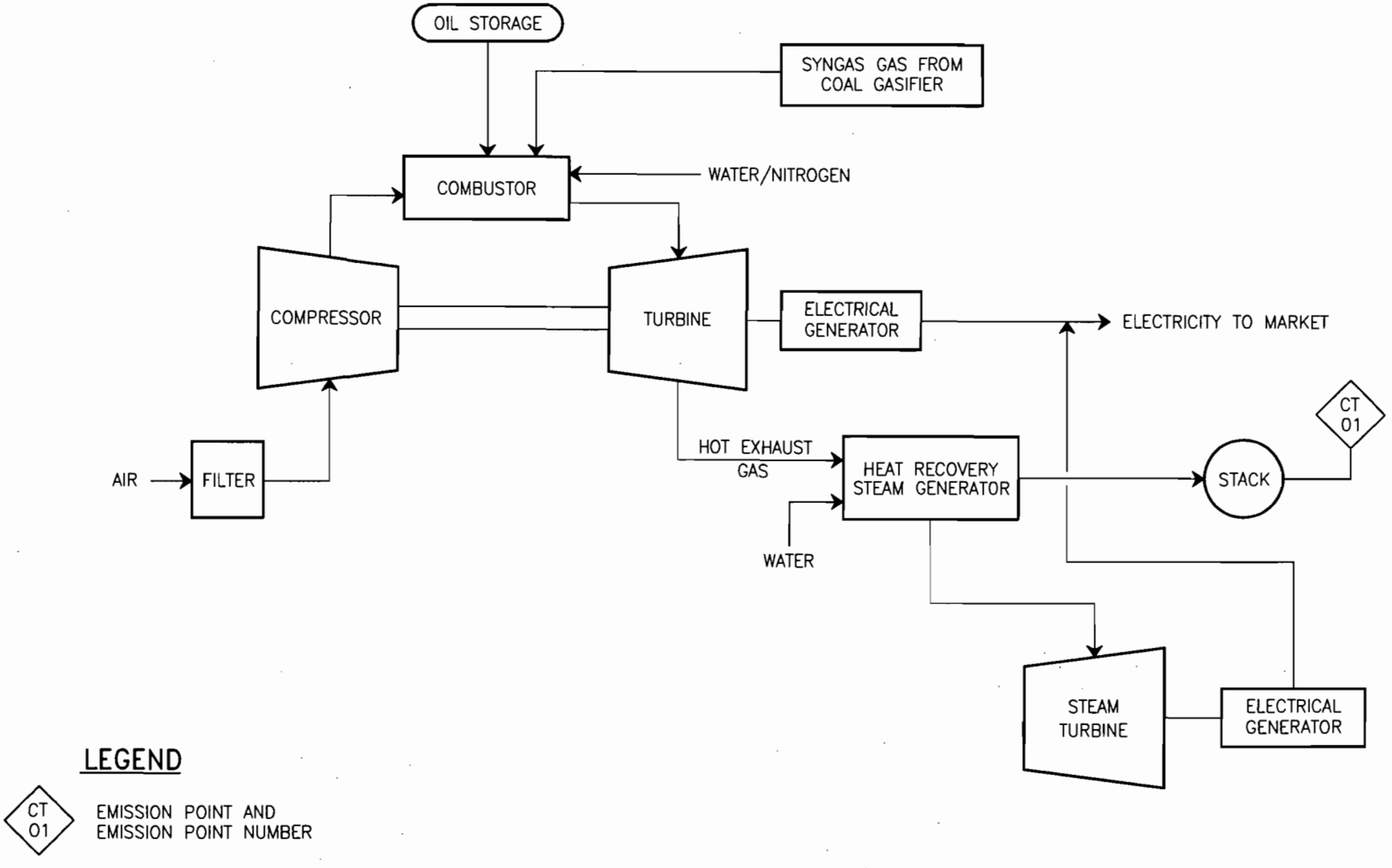

A-2c.

COMBUSTION TURBINE: PROCESS SCHEMATIC DIAGRAM

Source: ECT, 2004.

TAMPA ELECTRIC

A TECO ENERGY COMPANY

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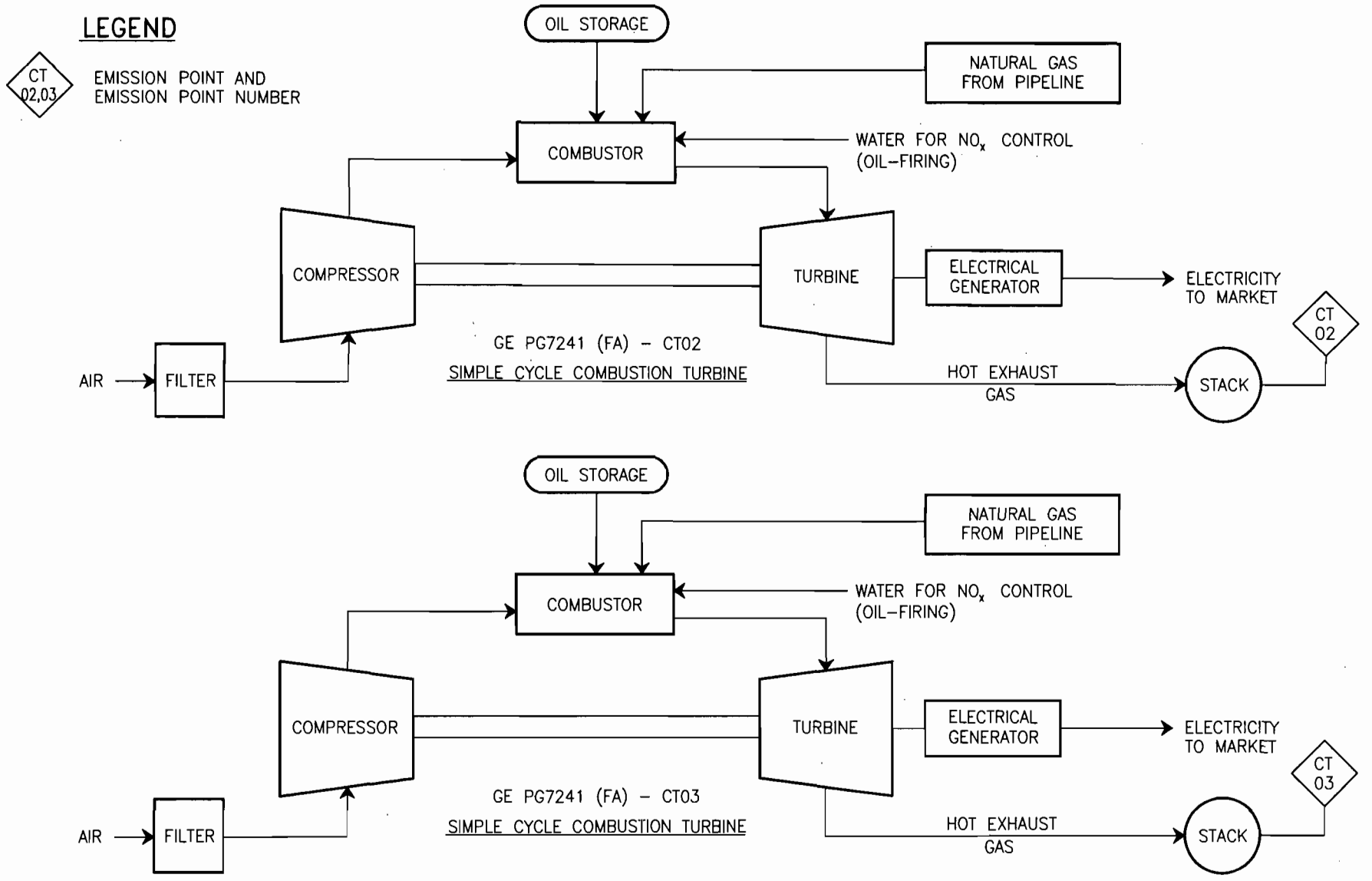

A-2d.

SIMPLE CYCLE COMBUSTION TURBINE: PROCESS FLOW DIAGRAM

Source: ECT, 2004.

TAMPA ELECTRIC

A TECO ENERGY COMPANY

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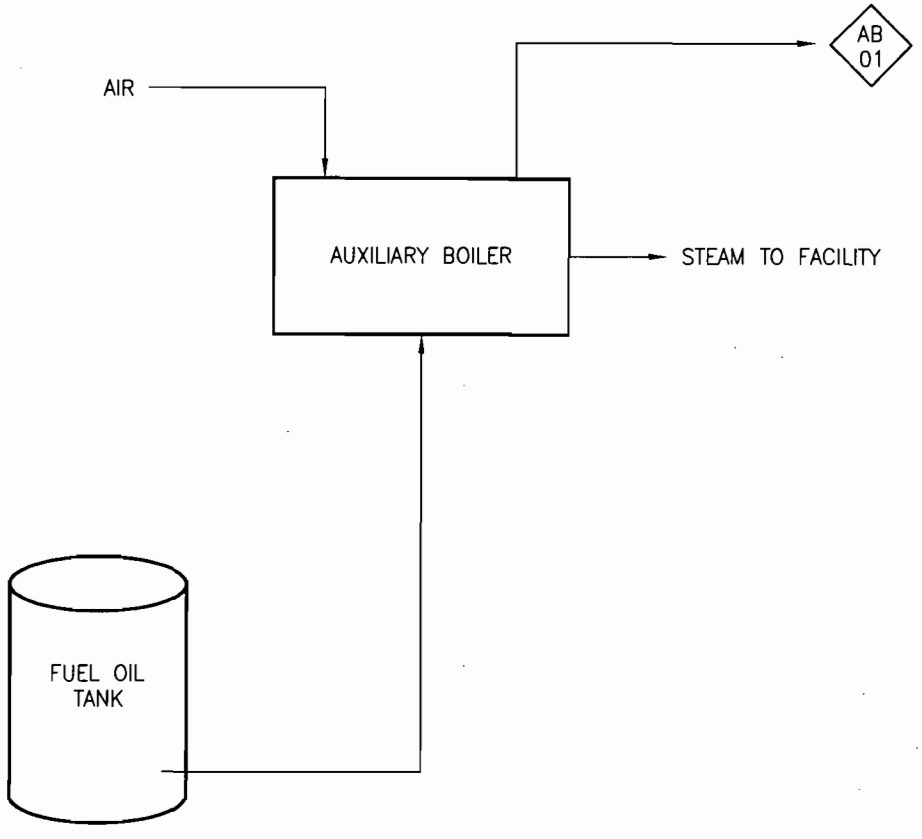

LEGEND

AB
01
EMISSION POINT AND
EMISSION POINT NUMBER

A-2e.

AUXILIARY BOILER: PROCESS SCHEMATIC DIAGRAM

Source: ECT, 2004.

TAMPA ELECTRIC

A TECO ENERGY COMPANY

ATTACHMENT A-3—
PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Particulate matter emissions from the coal handling equipment shall be controlled by enclosing or covering all coal storage, conveyors, and conveyor transfer points.

Other unconfined particulate matter emissions that may result from operations include:

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

The following techniques will be used to prevent unconfined particulate matter emissions on an as needed basis:

- Chemical or water application to:
  - Unpaved roads
  - Unpaved yard areas
- Paving and maintenance of roads, parking areas, and yards.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.
- Other techniques, as necessary.

ATTACHMENT A-4—
LIST OF INSIGNIFICANT ACTIVITIES

POLK POWER STATION

LIST OF INSIGNIFICANT EMISSION UNITS and/or ACTIVITIES

1. Brazing, soldering and welding.
2. Parts cleaning and degreasing at work stations with lids closed when not in use.
3. Storage tanks less than 550 gallons.
4. Non-HAP inorganic storage tanks greater than 550 gallons.
5. No. 2 fuel oil storage tanks greater than 550 gallons.
6. Laboratory equipment used for chemical or physical analyses.
7. Vehicle refueling operations.
8. Fire and safety equipment.
9. Turbine vapor extractor.
10. Covered belt conveyors transferring wet material.
11. Sand blasting and grit blasting where temporary total enclosures are used to contain particulate.
12. Equipment used for steam cleaning.
13. Vacuum pumps used for steam cleaning.
14. Equipment used exclusively for space heating, excluding boilers.
15. Surface coating operations utilizing 6.0 gallons per day or less, averaged monthly, of coatings containing greater than 5.0 percent VOC, by volume.
16. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
17. Degreasing units using heavier-than-air vapors exclusively, except any unit using or emitting any substance classified as a hazardous air pollutant.
18. Coal residual beneficiation process (CHARAH).

ATTACHMENT A-5—
IDENTIFICATION OF APPLICABLE REQUIREMENTS

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 60 - Standards of Performance for New Stationary Sources				
40 CFR Part 60 - Subparts B, C, Cb, Cc, Cd, Ce, D, Da, Dc, E, Ea, Eb, Ec, F, G, H, I, J, K, Ka, Kb, L, M, N, N, Na, O, P, Q, R, S, T, U, V, W, X, Z, AA, AAa, BB, CC, DD, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, AAA, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP,QQQ, RRR, SSS, TTT, UUU, VVV, and WWW		X		None of the listed NSPS' contain requirements that are applicable to the Polk Power Station.
40 CFR Part 60 Subpart A - General Provisions				
Notification and Recordkeeping	60.7(a)		EU 001, 003, 005, 009, 010	Notification requirements.
	60.7(c)(1) - (4), and 60.7(d)(1), (2)		EU 001, 003, 009, 010	If CEM device is installed, then excess emissions must be reported. Specifies format of excess emissions report.
	60.7(b) - (h)		EU 001, 003, 005, 009, 010	General recordkeeping and reporting requirements.
Performance Tests	60.8		EU 001, 003, 005, 009, 010	Conduct initial performance tests as required by EPA.
Compliance with Standards and Maintenance Requirements	60.11(d)		EU 001, 003, 005, 009, 010	At all times the facility shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.
Circumvention	60.12		EU 001, 003, 005, 009, 010	Cannot conceal an emission that would otherwise constitute a violation of an applicable standard.
Monitoring Requirements	60.13		EU 001, 003, 009, 010	Requirements for CEMS and monitoring devices.
40 CFR Part 60 Subpart Db - Standards of Performance for Industrial, Commercial, and Institutional Steam Generating Units				

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 2 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Standard for Sulfur Dioxide	60.42b(a)(e), (g), and (j)		EU 003	Sulfur dioxide shall not exceed 0.80 lb/MMBtu heat input for oil combustion. Emission and fuel sulfur limits are determined on a 30-day rolling average. Emission limits apply at all times, including startup, shutdown, and malfunction. Percent reduction requirements are not applicable to units combusting only very low sulfur oil.
Standard for Particulate Matter	60.43b(b), (f), and (g)		EU 003	Particulate matter shall not exceed 43 ng/J (0.10 lb/MMBtu). Opacity shall not exceed 20% (6 minute average) except for one 6-minute period per hour of not more than 27% opacity. Opacity standard applies at all times except during startup, shutdown, or malfunction.
Standard for Nitrogen Oxides	60.44b(a), (h), and (i)		EU 003	Nitrogen oxide emissions shall not exceed 0.20 lb/MMBtu for distillate oil (high heat release rate). Emission limits apply at all times, including startup, shutdown, and malfunction. Compliance is determined on a 30-day rolling average basis.
Compliance and performance test methods and procedures for sulfur dioxide	60.45b(j)		EU 003	Since only very low sulfur oil is being combusted, the facility is not subject to the compliance and performance testing requirements of 60.45b if the operator obtains fuel receipts per 60.49b(r).
Compliance and performance test methods and procedures for particulate matter and nitrogen oxides	60.46b(d)(1) - (7) and (e)(4)		EU 003	Specifies performance test methods (e.g., Methods 5, 5B, 17, 9) for particulate matter. Nitrogen oxide emissions are determined on a 30-day rolling average of hourly emissions.
Emission monitoring for sulfur dioxide	60.47b(f)		EU 003	If very low sulfur oil is combusted, the emission monitoring requirements of this section do not apply if the owner/operator obtains fuel receipts as described in 60.49b(r).
Emission monitoring for particulate matter and nitrogen oxides	60.48b(a) - (d), (e)(2), and (f)		EU 003	Requires continuous monitoring systems for opacity and nitrogen oxide emissions. Specifies span values and backup monitoring requirements for nitrogen oxides.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 3 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Reporting and recordkeeping requirements	60.49b(d), (f) - (j) and (r)		EU 003	Establishes reporting and recordkeeping requirements. Daily records of fuel combusted and an annual capacity factor calculated. Specifies records and reports be kept and/or submitted for opacity, nitrogen oxides, and sulfur dioxide. Fuel receipts certifying that the meets the definition of distillate oil per 60.41b.
40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants				
Standards for Particulate Matter	60.252		EU 005	Specifies particulate matter and opacity limits.
Monitoring of Operations	60.253		EU 005	Contains specific requirements for monitoring.
Test Methods and Procedures	60.254		EU 005	Specifies Methods 5 and 9 for determining particulate matter and opacity, respectively.
40 CFR Part 60 Subpart GG - Standards of Performance for Stationary Gas Turbines				
Standard for Nitrogen Oxides	60.332		EU 001, 009, 010	Specifies formula for determining allowable nitrogen oxide emission limit.
	60.334(a), (b)(1) and (b)(2)		EU 001, 009, 010	Nitrogen oxide CEMS may be used in lieu of continuous monitoring of fuel consumption and the ratio of water to fuel combusted. Specifies CEMS certification and operation requirements.
	60.335(a), (c)(1) - (3), (d), and (e)		EU 001, 009, 010	Specifies test methods and procedures.
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants for Source Categories: Subparts A, B, C, D, E, F, H, I, J, L, M, M, N, O, Q, R, T, V, W, Y, BB, and FF		X		None of the listed NESHAPS' contain requirements that are applicable to the Polk Power Station.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 4 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories: Subparts A, B, C, D, E, F, G, H, I, J, L, M, N, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, FF, HH, II, JJ, KK, LL, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, XXXX, YYYY, ZZZZ, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, and WWWWW		X		None of the listed NESHAPS' contain requirements that are applicable to the Polk Power Station.
40 CFR Part 64 - Compliance Assurance Monitoring		X		None of the emission units are not covered by this rule.
40 CFR Part 72 - Acid Rain Program Permits				
40 CFR Part 72 Subpart A - Acid Rain Program General Provisions				
Standard Requirements	72.9		EU 001, 009, and 010	General acid rain requirements
40 CFR Part 72 Subpart B - Designated Representative				
Designated Representative	72.2 - 72.25		EU 001, 009, and 010	General requirements pertaining to the designated representative.
40 CFR Part 72 Subpart C - Acid Rain Application				
Requirements to Apply	72.30(a)		EU 001, 009, and 010	Requirements to submit a complete Acid Rain permit by the applicable deadline.
	72.30(b)(1)(i)		EU 001, 009, and 010	Deadline to submit a complete Acid Rain permit application.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 5 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
	72.30(c)		EU 001, 009, and 010	Requirements to submit a complete Acid Rain permit application for each source with an affected unit at least six months prior to the expiration of an existing Acid Rain permit governing the unit during phase II or such longer time as may be approved under Part 70 of this chapter that ensures that the term of the existing permit will not expire before the effective date of the permit for which the application is submitted.
	72.30(d)		EU 001, 009, and 010	Requirements to submit an original and three copies of all permit applications to EPA.
Information for Acid Rain Permit Applications	72.31		EU 001, 009, and 010	General permit application requirements.
40 CFR Part 72 Subpart D - Acid Rain Compliance Plan and Compliance Options				
General	72.4		EU 001, 009, and 010	General Compliance Plan Requirements
40 CFR Part 72 Subpart I - Compliance Certification				
Annual Compliance Certification Report	72.9		EU 001, 009, and 010	Requirement to submit an annual compliance report.
40 CFR Part 75 - Continuous Emission Monitoring				
40 CFR Part 75 Subpart A - General				
Compliance Dates	75.4(a)(1)		EU 001, 009, and 010	Requirement to complete all certification tests for CEMS and COMS.
Prohibitions	75.5		EU 001, 009, and 010	General monitoring prohibitions.
40 CFR Part 75 Subpart B - Monitoring Provisions				
General Operating Requirements	75.10		EU 001, 009, and 010	General acid rain requirements
Specific Provisions for Monitoring SO_2 Emissions	75.11(a)		EU 001, 009, and 010	SO_2 continuous monitoring requirements.
Specific Provisions for Monitoring NOx Emissions	75.12(a), (b)		EU 001, 009, and 010	NOx continuous monitoring requirements.
Specific Provisions for Monitoring CO_2 Emissions	75.13(a)		EU 001, 009, and 010	CO_2 continuous monitoring requirements.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 6 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Specific Provisions for Monitoring Opacity	75.14(a)		EU 001, 009, and 010	Opacity continuous monitoring requirements.
40 CFR Part 75 Subpart C - Operation and Maintenance Requirements				
Certification and Recertification Requirements	75.20(a)		EU 001, 009, and 010	Requires that monitoring systems meet initial certification requirements by the deadlines stipulated in 75.4.
	75.20(a)(1)		EU 001, 009, and 010	Requires notification of certification test or retest dates at least 45 days prior to certification testing.
	75.20(a)(2)		EU 001, 009, and 010	Requires submittal of certification application in accordance with 75.60.
	75.20(a)(5)		EU 001, 009, and 010	Procedures to be used in the event that the agency issues a disapproval of certification application or certification status.
	75.20(c)(1) - (7), (9)		EU 001, 009, and 010	Certification procedure requirements.
Quality Assurance and Quality Control Requirements	75.21		EU 001, 009, and 010	General QA/QC requirements.
	75.22		EU 001, 009, and 010	Specifies required test methods to be used for certification or recertification testing.
Out-Of-Control Periods	75.24		EU 001, 009, and 010	Specifies out-of-control periods and the required actions to be taken when they occur.
40 CFR Part 75 Subpart D - Missing Data Substitution Procedures				
General Provisions	75.30		EU 001, 009, and 010	General missing data requirements.
Initial Missing Data Procedures	75.31		EU 001, 009, and 010	Missing data procedure requirements during the first 720 and 2,160 quality-assured monitor operating hours for SO2 pollutant concentration monitor and flow monitor/NOx CEMS, respectively.
Determination of Monitor Data Availability for Standard Missing Data Procedures	75.32		EU 001, 009, and 010	Monitor data availability procedure requirements after the first 720 and 2,160 quality-assured monitor operating hours for SO2 pollutant concentration monitor and flow monitor/NOx CEMS, respectively.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 7 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Standard Missing Data Procedures	75.33		EU 001, 009, and 010	Missing data substitution procedure requirements after the first 720 and 2,160 quality-assured monitor operating hours for SO2 pollutant concentration monitor and flow monitor/NOx CEMS, respectively.
40 CFR Part 75 Subpart E - Alternative Monitoring Systems				
Alternative Monitoring Systems	75.40 - 75.48		EU 001, 009, and 010	Optional requirements for alternative monitoring systems.
40 CFR Part 75 Subpart F - Recordkeeping Requirements				
General Recordkeeping Provisions	75.50		EU 001, 009, and 010	General recordkeeping requirements.
Certification, Quality Assurance, and Quality Control Record Provisions	75.59		EU 001, 009, and 010	General QA/QC recordkeeping requirements.
Monitoring Plan	75.53(a) - (c)		EU 001, 009, and 010	Requirement to prepare and maintain a Monitoring Plan
40 CFR Part 75 Subpart G - Reporting Requirements				
General Provisions	75.60		EU 001, 009, and 010	General reporting requirements.
Notification of Certification and Recertification Test Dates	75.61		EU 001, 009, and 010	Requires written submittal of certification tests, recertification test, and revised test dates for CEMS. Notice of certification testing shall be submitted at least 45 days prior to the first day of certification for recertification testing. Notification of any proposed adjustment to certification testing dates must be provided at least 7 business days prior to the proposed date change.
Monitoring Plan	75.62		EU 001, 009, and 010	Monitoring Plan required to be submitted no later than 45 days prior to the certification test.
Certification or Recertification Application	75.63		EU 001, 009, and 010	Requires submittal of a certification application within 30 days after completing the certification test.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 8 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Quarterly Reports	75.64(a)(1) - (5)		EU 001, 009, and 010	Requirement to submit quarterly data report.
	75.64(b), (c), (d)		EU 001, 009, and 010	Requirement to submit compliance certification in support of each quarterly data report. Requirement to submit quarterly reports in an electronic format to be specified by EPA.
	75.65		EU 001, 009, and 010	Requirement of reports of excess opacity emissions to the applicable State (FDEP) agency in the format specified by the State agency.
40 CFR Part 77 - Excess Emissions				
Penalties for Excess Emissions of Sulfur Dioxide and Nitrogen Oxides	77.6		EU 001, 009, and 010	Requirement to pay a penalty if excess emissions of SO2 or NOx occur at any affected unit during any year.
40 CFR Part 78 - Appeal Procedures for Acid Rain Program				
	78.1 - 78.20		EU 001, 009, and 010	Optional appeal procedures for EPA Acid Rain program decisions.
40 CFR Part 50 - National Primary and Secondary Ambient Air Quality Standards Requirements		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 51 - Preparation, Adoption, and Submittal of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 52 - Approval and Promulgation of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 62 - Approval and Promulgation of State Plans for Designated Facilities and Pollutants		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 68 - EPA Provisions for Chemical Accident Prevention				
General			Facilitywide	Requires compliance with risk management planning regulations.
Hazard Assessment			Facilitywide	Defines hazard assessment requirements.
Program 2 Prevention Program			Facilitywide	Defines elements of the prevention program.
Program 3 Prevention Program		X		
Emergency Response			Facilitywide	Defines elements of the emergency response plan.
Regulated Substances for Accidental Release Prevention			Facilitywide	Defines elements subject to regulation.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 9 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Risk Management Plan			Facilitywide	Defines elements of the risk management plan.
Other Requirements			Facilitywide	Defines certain recordkeeping requirements.
40 CFR Part 70 - State Operating Permit Programs		X		State agency requirements - not applicable to individual emission sources.
40 CFR Parts 53, 54, 55, 56, 58, 62, 66, 67, 69, 71, 74, 76, 79, 80, 81, 85, 86, 87, 88, 89, and 90		X		The listed regulations do not contain any requirements that are applicable to the Polk Power Station.
40 CFR Part 82 - Protection of Stratospheric Ozone				
Production and Consumption Controls	Subpart A	X		Polk Power Station does not produce or consume ozone depleting substances.
Servicing of Motor Vehicle Air Conditioners	Subpart B	X		Polk Power Station does not perform servicing of motor vehicles, which involves refrigerant in the motor vehicle air conditioner. All such servicing is conducted off-site by persons who comply with Subpart B requirements.
Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Subpart C	X		Polk Power Station does not sell or distribute any banned nonessential substances.
The Labeling of Products Using Ozone-Depleting Substances	Subpart E	X		Polk Power Station does not produce any products containing ozone depleting substances.
Recycling and Emissions Reduction	Subpart F			
Prohibitions	82.154	X		Polk Power Station personnel will not maintain, service, repair, or dispose of any appliances. All such activities will be performed by independent parties in compliance with 82.154.

Table A-5a. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 10 of 10)

Regulation	Citation	Not Applicable	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Required Practices	82.156 except 82.156(i)(5), (6), (9), (10), and (11)	X	Appliances as defined by 82.152 - any device which contains and uses a Class I or II substance as a refrigerant and which is used for household or commercial purposes including any air conditioner, refrigerator, chiller, or freezer.	Contractors will maintain, service, repair, and dispose of any appliances in compliance with 82.156 required practices.
Technician Certification	82.161	X		Polk Power Station Personnel will not maintain, service, repair, or dispose of any appliances and therefore are not subject to technician certification requirements.
Certification By Owners of Recovery and Recycling Equipment	82.162	X		Polk Power Station Personnel will not maintain, service, repair, or dispose of any appliances and therefore do not use recovery and recycling equipment.
Reporting and Recordkeeping Requirements	82.166(k), (m), and (n)		Appliances as defined by 82.152.	Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the date and type of service, as well as the quantity of refrigerant added.

Source: ECT, 2004.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-4, F.A.C. - Permits: Part I General					
Scope of Part I	62-4.001, F.A.C.	X			Contains no applicable requirements.
Definitions	62-4.020, .021, F.A.C.	X			Contains no applicable requirements.
General Prohibition	62-4.030, F.A.C.*		X		All stationary air pollution sources must be permitted, unless otherwise exempted.
Exemptions	62-4.040(1)(a), and (b), F.A.C		X		Certain structural changes exempt from permitting. Other stationary sources exempt from permitting upon FDEP insignificance determination.
Procedures to Obtain Permits and Other Authorizations	62-4.050, F.A.C.		X		Specifications of forms, certifications, fees, etc.
Permit Processing	62-4.055, F.A.C.	X			Contains no applicable requirements.
Consultation	62-4.060, F.A.C.	X			Consultation is encouraged, not required.
Standards for Issuing or Denying Permits; Issuance; Denial	62-4.070, F.A.C.	X			Establishes standard procedures for FDEP. Requirement is not applicable to the facility.
Modification of Permit Conditions	62-4.080, F.A.C	X			A Title V permit condition modification is not requested.
Renewals	62-4.090, F.A.C.		X		Establishes permit renewal criteria. Additional criteria are cited at 62-213.430(3), F.A.C.
Suspension and Revocation	62-4.100, F.A.C.		X		Establishes permit suspension and revocation criteria.
Financial Responsibility	62-4.110, F.A.C.		X		The Department may require an applicant to submit proof of financial responsibility and/or post a bond.
Transfer of Permits	62-4.120, F.A.C.	X			A sale or legal transfer of a permitted facility is not being requested..
Plant Operation - Problems	62-4.130, F.A.C.		X		Immediate notification is required whenever the permittee is temporarily unable to comply with any permit condition. Notification content is specified. **(potential future requirement)**

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 2 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Permit Review	62-4.150, F.A.C.	X			Failure to request a hearing within 14 days of proposed or final Agency action on a permit application shall be deemed a waiver to the right to an administrative hearing.
Permit Conditions	62-4.160(2), (8), and (14), F.A.C.		X		Lists general conditions that must be contained in permits. Specifically, 62-4.160(2) states that deviations from original specifications or conditions of the permit are not allowed. Under 62-4.160(8) applicants must report the cause and duration of non-compliance, and 62-4.160(14) requires permit and monitoring records must be maintained at the facility and supplied to FDEP upon request.
Chapter 62-4, F.A.C. - Part II Specific Permits; Requirements					
Construction Permits	62-4.210, F.A.C.	X			General requirements for construction permits.
Operation Permits for New Sources	62-4.220, F.A.C.	X			General requirements for initial new source operation permits.
Chapter 62-204, F.A.C. - Air Pollution Control - General Provisions					
State Implementation Plan	62-204.100, .200, .220(1)-(3), .240, .260, .320, .340, .360, .400, and .500, F.A.C.	X			Contains no applicable requirements.
Ambient Air Quality Protection	62-204.220(4), F.A.C.	X			Assessments of ambient air pollutant impacts must be made using applicable air quality models, data bases, and other requirements approved by FDEP and specified in 40 CFR Part 51, Appendix W. Air quality modeling is not required for Title V permit applications.
Federal Regulations Adopted by Reference	62-204.800(8), F.A.C.			EU-001, 003, 005, 009, & 010	All Federal Regulations cited in the rules by the Department are adopted and incorporated by reference. Specifically, the new source performance standard contained in 40 CFR 60 Subparts Y, Db, and GG applies to the solid fuel handling system, the auxiliary boiler, and the stationary gas turbines.
Federal Regulations Adopted by Reference	62-204.800(10) and (11), F.A.C.		X		National Emissions Standards for Hazardous Air Pollutants; see Table A-5a for detailed federal regulatory citations.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 3 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Federal Regulations Adopted by Reference	62-204.800(12), F.A.C.	X			Compliance Assurance Monitoring Program; see Table A-5a for detailed federal regulatory citations.
Federal Regulations Adopted by Reference	62-204.800(15), F.A.C.		X		Part 70 State Operating Permit Program; see Table A-5a for detailed federal regulatory citations.
Federal Regulations Adopted by Reference	62-204.800(16) to (21), F.A.C.			EU-001, 009, & 010	Acid Rain Program; see Table A-5a for detailed federal regulatory citations.
Federal Regulations Adopted by Reference	62-204.800(23), F.A.C.		X		Protection of Stratospheric Ozone; see Table A-5a for detailed federal regulatory citations.
Chapter 62-210, F.A.C. - Stationary Sources - General Requirements					
Purpose and Scope	62-210.100, F.A.C.	X			Contains no applicable requirements.
Definitions	62-210.200, F.A.C.	X			Contains no applicable requirements.
Permits Required	62-210.300, F.A.C., except 62-210.300(1) and (4), F.A.C.		X		Air operation permit required, with the exception of certain facilities and sources. Startup notification required if a permitted source has been shut down for more than 1 year.
Air Construction Permits	62-210.300(1), F.A.C.	X			Application is for Title V operating permit renewal. A construction permit is not requested in this application.
Emission Unit Reclassification	62-210.300(5), (6), & (7) F.A.C.		X		Notification of startup, emission unit reclassification, and transfer of air permit **(potential future requirements).**
Public Notice and Comment	62-210.350(1), F.A.C.		X		All permit applicants, including those for renewals and revisions, are required to publish notice of proposed agency action **(future requirement).**
Additional Notice Requirements for Sources Subject to Prevention of Significant Deterioration or Nonattainment Area New Source Review	62-210.350(2), F.A.C.	X			PSD and nonattainment area NSR application not required for permit renewal application.
Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources	62-210.350(3), F.A.C.		X		Notice requirements for Title V operating permits, renewals, and revisions **(future requirement).**

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 4 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Administrative Permit Corrections	62-210.360, F.A.C.	X			Application is for initial Title V operating permit. An administrative permit correction is not requested in this application.
Notification of Intent to Relocate Air Pollutant Emitting Facility	62-210.370(1), F.A.C.	X			Facility does not have any relocatable emission units.
Annual Operating Report for Air Pollutant Emitting Facility	62-210.370(3), F.A.C.		X		Title V sources are required to submit an annual operating report.
Stack Height Policy	62-210.550, F.A.C.	X		EU-001, 003, 004, 009, & 010	Limits credit in air dispersion studies to good engineering practice (GEP) stack heights.
Circumvention	62-210.650, F.A.C.		X		An applicable air pollution control device cannot be circumvented and must be operated whenever the emission unit is operating.
Excess Emissions	62-210.700, F.A.C.			EU-001, 003, 004, 009, & 010	Excess emissions due to startup, shut down, and malfunction are permitted. Excess emissions due to malfunction must be reported. Excess emissions during soot blowing and load change are permitted with restrictions. **(potential future requirement)**
Forms and Instructions	62-210.900, F.A.C.		X		List required FDEP forms for stationary sources.
Notification Forms for Air General Permits	62-210.920, F.A.C.	X			Contains no applicable requirements.
Chapter 62-212, F.A.C. - Stationary Sources - Preconstruction Review					
Purpose and Scope	62-212.100, F.A.C.	X			Contains no applicable requirements.
General Preconstruction Review Requirements	62-212.300, F.A.C.	X			Air construction permit requirements, not applicable to Title V operating permit renewal applications.
Prevention of Significant Deterioration	62-212.400(7)(b), F.A.C.	X			The operation permit shall contain all operating conditions and provisions required under 62-212.400 and set forth in the original or amended construction permit.
Preconstruction Review for Nonattainment Areas	62-212.500, F.A.C.	X			Facility not located in any nonattainment area or nonattainment area of influence.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 5 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Air Emissions Bubble	62-212.710, F.A.C.	X			Contains no applicable requirements.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution					
Purpose and Scope	62-213.100, F.A.C.	X			Contains no applicable requirements.
Responsible Official	62-213.202, F.A.C.		X		Title V sources must designate a responsible official.
Annual Emissions Fee	62-213.205, F.A.C.		X		Title V sources must pay an annual emissions fee.
Title V Air General Permits	62-213.300, F.A.C.	X			Not an eligible facility.
Permits and Permit Revisions Required	62-213.400, F.A.C.		X		Title V operation permit required. Lists changes for which a permit revision is required **(potential future requirement)**.
Concurrent Processing of Permit Applications	62-213.405, F.A.C.	X			No construction permit is being sought at this time.
Changes Without Permit Revision	62-213.410, F.A.C.		X		Certain changes may be made if specific notice and recordkeeping requirements are met.
Immediate Implementation Pending Revision Process	62-213.412, F.A.C.		X		Certain modifications can be implemented pending permit revision if specific criteria are met **(potential future requirement)**.
Fast-Track Revisions of Acid Rain Parts	62-213.413, F.A.C.			EU-001, 009, & 010	Optional provisions for Acid Rain permit revisions **(potential future requirement)**.
Trading of Emissions within a Source	62-213.415, F.A.C.		X		Defines the conditions under which emissions trading is allowable.
Permit Applications	62-213.420(3), and (4), F.A.C.		X		Title V operating permit renewal application must contain all the information specified by 62-213.420(3), F.A.C. and be certified by the responsible official.
Permit Issuance, Renewal, and Revision	62-213.430(3) and (6), F.A.C.		X		Permits being renewed are subject to the same requirements that apply to permit issuance. Permit renewals shall contain the information specified in 62-210.900(1) and 62-213.420(3), F.A.C. 420(6) contains criteria for defining insignificant emission units and activities.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 6 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Permit Content	62-213.440(1), and (2), F.A.C.		X		Any recording, monitoring, or reporting requirements that are time specific shall be in accordance with the effective date of the permit i.e., January 1, 1999, which defines day one. Defines schedule for submitting certification forms or compliance schedules.
Permit Review by EPA and Affected States	62-213.450, F.A.C.	X			Contains no applicable requirements.
Permit Shield	62-213.460, F.A.C.		X		Provides permit shield for facilities in compliance with permit terms and conditions.
Forms and Instructions	62-213.900(1), (7), and (8), F.A.C.		X		Lists applicable forms such as "Major Air Pollution Source Annual Emissions Fee," Statement of Compliance," and "Responsible Official Notification."
Chapter 62-214 F.A.C. - Requirements for Sources Subject to the Federal Acid Rain Program					
Purpose and Scope	62-214.100, F.A.C.	X			Contains no applicable requirements.
Applicability	62-214.300, F.A.C.		X	EU-001, 009, & 010	Facility includes Acid Rain units, therefore facility compliance with 62-213 and 62-214, F.A.C., is required.
Applications	62-214.320, F.A.C.		X	EU-001, 009, & 010	Requires Title V sources having Acid Rain unit(s) to submit an Acid Rain Application to FDEP.
Acid Rain Compliance Plan and Compliance Options	62-214.330, F.A.C.			EU-001, 009, & 010	Acid rain compliance plan must be submitted to the Department.
Exemptions	62-214.340, F.A.C.		X		An application may be submitted for certain exemptions **(potential future requirement)**.
Certification	62-214.350, F.A.C.		X	EU-001, 009, & 010	The designated representative must certify all Acid Rain submissions.
Department Action on Applications	62-214.360, F.A.C.	X			Contains no applicable requirements.
Revisions and Administrative Corrections	62-214.370, F.A.C.		X		Defines revision procedures and automatic amendments **(potential future requirement)**.
Acid Rain Part Content	62-214.420, F.A.C.			EU-001, 009, & 010	Defines content of Acid Rain Part.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 7 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Implementation and Termination of Compliance Options	62-214.430, F.A.C.		X		Defines permit activation and termination procedures **(potential future requirement).**
Chapter 62-252 - Gasoline Vapor Control					
Rules for gasoline vapor control equipment	62-252, F.A.C.	X			Facility not located in an ozone nonattainment area or an air quality maintenance area for ozone
Chapter 62-256, F.A.C. - Open Burning and Frost Protection Fires					
Declaration and Intent	62-256.100, F.A.C.	X			Contains no applicable requirements.
Definitions	62-256.200, F.A.C.	X			Contains no applicable requirements.
Prohibitions	62-256.300, F.A.C.*		X		Prohibits open burning.
Agricultural and Silvacultural Fires	62-256.400, F.A.C.	X			Contains no applicable requirements.
Burning for Cold and Frost Protection	62-256.450, F.A.C.	X			Limited to agricultural protection.
Land Clearing	62-256.500, F.A.C.*		X		Defines allowed open burning for non-rural land clearing and structure demolition.
Industrial, Commercial, Municipal, and Research Open Burning	62-256.600, F.A.C.*		X		Prohibits industrial open burning
Open Burning allowed	62-256.700, F.A.C.	X			Contains no applicable requirements.
Effective Date	62-256.800, F.A.C.	X			Contains no applicable requirements.
Chapter 62-257 - Asbestos Program					
Controls release of asbestos to the atmosphere and establishes fees.	62-257.301, .400, and .900, F.A.C.*		X		Requires notice and payment of fee for asbestos removal projects **(potential future requirement).**
Chapter 62-281 - Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling					

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 8 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Establishes installation and proper use of motor vehicle refrigerant recycling equipment.	62-281.100, F.A.C.			Vehicle Fleet Maintenance	Servicing of motor vehicle air conditioners and vehicle maintenance that may release refrigerants is conducted.
Chapter 62-296 - Stationary Sources - Emission Standards					
Purpose and Scope	62-296.100, F.A.C.	X			Contains no applicable requirements
General Pollutant Emission Limiting Standard, Volatile Organic Compounds Emissions	62-296.320(1), F.A.C.		X		Known and existing vapor control devices must be applied as required by the Department. No such devices have been required at Polk Power Station.
General Pollutant Emission Limiting Standard, Objectionable Odor Prohibited	62-296.320(2), F.A.C.*		X		Objectionable odor release is prohibited.
General Pollutant Emission Limiting Standard, Industrial, Commercial, and Municipal Open Burning Prohibited	62-296.320(3), F.A.C.*		X		Open burning in connection with industrial, commercial, or municipal operations is prohibited.
General Particulate Emission Limiting Standard, Process Weight Table	62-296.320(4)(a), F.A.C.		X		Facility does not have any applicable emission units. Combustion emission units are exempt per 62-296.320(4)(a)1a.
General Particulate Emission Limiting Standard, General Visible Emission Standard	62-296.320(4)(b), F.A.C.		X		Opacity limited to 20 percent, unless otherwise permitted. Test methods specified.
General Particulate Emission Limiting Standard, Unconfined Emission of Particulate Matter	62-296.320(4)(c), F.A.C.		X		Reasonable precautions must be taken to prevent unconfined particulate matter emission.
Sulfuric Acid Plants	62-296.402(2)(a), (b), & (c), F.A.C.			E.U. 004	Standards for new sulfuric acid plants, i.e., 10% opacity, 4 lb of sulfur dioxide per ton of acid produced, and 0.15 lb of acid mist per ton of acid produced.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 9 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
Existing Fossil Fuel Fired Steam Generators with More Than 250 MMBtu/hr Heat Input	62-296.405(1)(a), (b), (c)1.j. and (c)3., (e)1, 2 and 3, and (f)1.b., and g., F.A.C.	X			No applicable units at facility.
New and Existing Fossil Fuel Fired Steam Generators with Less Than 250 MMBtu/hr Heat Input	62-296.406(1), (2), (3), F.A.C.			E.U. 003	Auxiliary boiler covered by this rule which requires a 20% opacity limit. Particulate matter and sulfur dioxide emissions are limited by BACT.
Specific Emission Limiting and Performance Standards	62-296.401 through 62-296.404 and 62-296.407 through 62-296.417, F.A.C.	X			No applicable unit at facility.
Reasonably Available Control Technology (RACT) Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x) Emitting Facilities	62-296.500 through 62-296.516, F.A.C.	X			Facility is not located in an ozone nonattainment area or an ozone air quality maintenance area.
Reasonably Available Control Technology (RACT) - Requirements for Major VOC- and NO_x-Emitting Facilities	62-296.570, F.A.C.	X			Facility is not located in a specified ozone nonattainment area or a specified ozone air quality maintenance area (Broward, Dade and Palm Beach Counties).
Reasonably Available Control Technology (RACT) - Lead	62-296.600 through 62-296.605, F.A.C.	X			Facility not located in a lead nonattainment area or a lead air quality maintenance area.
Reasonably Available Control Technology (RACT)—Particulate Matter	62-296.700 through 62-296.712, F.A.C.	X			Facility not located in a PM nonattainment area or a PM air quality maintenance area.
Chapter 62-297, Stationary Sources - Emissions Monitoring					
Purpose and Scope	62-297.100, F.A.C.	X			Contains no applicable requirements.

Table A-5b. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the Polk Power Station (Continued, Page 10 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable Emission Units	Applicable Requirement or Non-Applicability Rationale
General Test Requirements	62-297.310(1) through (8), F.A.C.			E.U. 001, 003, 004, 009 and 010	Specifies general compliance test requirements including the number of runs, operating rates during testing, emission rate calculation, applicable test procedures, determination of process variables, required stack sampling facilities, frequency of tests, and content of test reports.
Compliance Test Methods	62-297.401, F.A.C.	X			List methods to be used for compliance testing.
Supplementary Test Procedures	62-297.440, F.A.C.	X			Contains other test procedures adopted by reference.
EPA VOC Capture Efficiency Test Procedures	62-297.450, F.A.C.	X			Contains no applicable requirements.
CEMS Performance Specifications	62-297.520, F.A.C.	X			Contains performance specifications for continuous emissions monitoring.
Exceptions and Approval of Alternate Procedures and Requirements	62-297.620, F.A.C.	X			Exceptions or alternate procedures have not been requested.

*State requirement only; not federally enforceable.

Source: ECT, 2003.

ATTACHMENT A-6—
COMPLIANCE REPORT AND PLAN

POLK POWER STATION

COMPLIANCE REPORT, PLAN, AND CERTIFICATION

1. Compliance Report and Plan

Attachment A-5 to this Title V operation permit renewal application identifies the requirements that are applicable to the emission units that comprise this Title V source. Each emissions unit is in compliance, and will continue to comply, with the respective applicable requirements.

The emission units that comprise this Title V source will comply with future-effective applicable requirements on a timely basis.

2. Proposed Schedule for the Submission of Periodic Compliance Statements Throughout the Permit Term

Periodic compliance statements are proposed to be submitted on an annual basis within 60 days after the end of each calendar year pursuant to the requirements of FDEP Rule 62-213.440(3)(a)2.a, F.A.C.

3. Compliance Certification

I, the undersigned, am the responsible official as defined in Chapter 62-210.200(220), F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Mark J Hornick — 04/21/04

Mark J. Hornick
General Manager

Date

ATTACHMENT A-7—
VERIFICATION OF RISK MANAGEMENT PLAN SUBMISSION TO EPA

POLK POWER STATION

RISK MANAGEMENT PLAN VERIFICATION

Polk Power Station is a 260-meqawatt (MW) electric generating facility located near Mulberry, Florida, in southwest Polk County. The integrated gasification combined-cycle facility is a first-of-its-kind combination of two leading technologies including coal gasification, which uses coal to create a clean-burning gas and combined cycle, which is the most efficient method of producing electricity commercially available today. The gasification portion of the plant produces a clean coal gas, which fuels a combustion turbine. Coal is combined with oxygen in the gasifier to product the gaseous fuel. The gas is the cleaned by a "gas cleanup" process. After cleaning the coal gas is used in the combustion turbine to produce electricity. The goal gas is a mixture of hydrogen (H_2) and carbon monoxide (CO) at concentrations ranging from 65 percent to 85 percent by volume.

Per information provided by Tampa Electric Company (TEC), the gasification process contains approximately 646 pounds of H_2 and 22,108 pounds of wet gas at any one time or a H_2 concentration of 3 percent by weight. Because the concentration of H_2 is greater than 1 percent by weight and because the 22,108 pound weight of the entire mixture is greater than the threshold of 10,000 pounds for regulated flammable substances, the gasification process is subject to 40 Code of Federal Regulations (CFR) Part 68 for H_2.

Under 40 CFR Part 68, which is also known as the Chemical Accident Prevention Provisions, any owner or operator of a stationary source that has more than a threshold quantity of a regulated substance is required to establish a Risk Management Program. The owner or operator regulated under the Risk Management Program is classified into one of three program levels, depending on the nature of the regulated process.

Under the conditions set in 40 CFR Part 68, Polk Power Station is classified in Program 1. The requirements to be eligible for Program 1 are as follows:

- There are no public receptors within a distance to an endpoint from a worst-case release.
- The process has had no release of a regulated substance in the pat 5 years where exposure to the substance, its reaction products, overpressures generated by explosion involving the substance, or radiant heat fro ma fire involving the substance resulted in one or more offsite deaths, injuries, or response or restoration activities for exposure of an environmental receptor.
- The subjected facility has coordinated emergency response activities with the local emergency planning and response organizations.

An RMP was submitted in a method and format to a central point as specified by EPA on June 17, 1999 prior to the deadline of Jun 21, 1999, per 40 CFR 68.150(a) and (b).

Please find enclosed Tampa Electric Company's annual registration fee, and the appropriate registration fee form for the above referenced facility during the 1999 calendar year along with a copy of a check made payable to Cashier, Department of Community Affairs in the amount of $100.00 to cover the fees associated with Program Level 1 for the Polk Power Station regulated process.

BEST AVAILABLE COPY

Form RMP-001

Reporting Date 6/21/99

ANNUAL REGISTRATION FEE FORM FOR SINGLE STATIONARY SOURCE

FLORIDA STATE EMERGENCY RESPONSE COMMISSION

Please type or print in black ink.

Owner/Operator Information

Owner Name: Tampa Electric Company

Owner Address: 702 N. Franklin Street, Tampa, Florida 33602-4429

Owner Telephone: (813)228-4111

Operator Name: Tampa Electric Company

Operator Address: 9995 State Road 37 South, Mulberry, Florida 33860-0775

Operator Telephone: (941)428-1405/(813) 228-4111

FOR SECURITY PURPOSES, THE BORDER OF THIS DOCUMENT CONTAINS MICROPRINTING

TECO TAMPA ELECTRIC

Tampa Electric Company
Post Office Box 3285
702 North Franklin Street
Tampa, Florida 33601

NationsBank
NationsBank of Georgia NA

Check Number 0904447

64-1278-8
611

Check Date 6/14/99

Check Amount ********$100.00

PAY One Hundred Dollars and 00/100 Cents

THE ORDER OF CASHIER
DEPARTMENT OF COMMUNITY AFFAIRS

THE REVERSE SIDE OF THIS DOCUMENT INCLUDES AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW

⑈090444 7⑈ ⑆063112788⑆010 116 3492⑈

Tampa, Florida 36601-0111

Representative Telephone: (813)630-7374/(813)228-4111

Amount tendered: $100.00 Check/Money Order Number: 0904447

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this form, and that based upon my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

Name: C. Kay McDaniel
(Printed name of owner or operator's authorized representative)

Signature: C Kay McDaniel
(Signature of owner or operator's authorized representative)

Date: June 17, 1999

Remittance Instructions

Form RMP-001

Reporting Date 6/17/99

ANNUAL REGISTRATION FEE FORM FOR SINGLE STATIONARY SOURCE

FLORIDA STATE EMERGENCY RESPONSE COMMISSION

Please type or print in black ink.

Owner/Operator Information

Owner Name: Tampa Electric Company

Owner Address: 702 N. Franklin Street, Tampa, Florida 33602-4429

Owner Telephone: (813)228-4111

Operator Name: Tampa Electric Company

Operator Address: 9995 State Road 37 South, Mulberry, Florida 33860-0775

Operator Telephone: (941)428-1405/(813) 228-4111

Florida Secretary of State ID#: 157782

Federal Employer ID #: 590475140

Stationary Source Information

Latitude: 27 43 43.0 Longitude: -081 59 23.0

Standard Industrial Classification (S.I.C.) or
North American Industry Classification System (N.A.I.C.S.): 22111

Highest Program Level for This Stationary Source: (1) 2 3 (circle one)

Regulated Substance(s) in Highest Program Level Process:
Name: Hydrogen
C.A.S.#: 1333-74-0

Payment Information

Representative: C. Kay McDaniel, Administrator, Environmental Projects
(Name and title of owner or operator's authorized representative)

Representative Address: P.O. Box 111

Tampa, Florida 36601-0111

Representative Telephone: (813)630-7374/(813)228-4111

Amount tendered: $100.00 Check/Money Order Number: 0904447

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this form, and that based upon my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

Name: C. Kay McDaniel
(Printed name of owner or operator's authorized representative)

Signature: _____ Date: June 17, 1999
(Signature of owner or operator's authorized representative)

Remittance Instructions

Section 1. Registration Information

1.1 Source Identification: There were no reportable accidents in the last 5 years.

a. Facility Name: Polk Power Station

b. Parent Company #1 Name: Tampa Electric Company

c. Parent Company #2 Name: Teco Energy Company

1.2 EPA Facility Identifier:

1.3 Other EPA Systems Facility Identifier: FLO-000-336-057

1.4 Dun and Bradstreet Numbers (DUNS):

a. Facility DUNS: 941334666

b. Parent Company #1 DUNS: 006924286

c. Parent Company #2 DUNS: 048295869

1.5 Facility Location Address:

a. Street 1: 9995 State Route 37 South

b. Street 2:

c. City: Mulberry **d. State:** FL **e. Zip:** 33860 - 0775

f. County: Polk

Facility Latitude and Longitude:

g. Lat. (ddmmss.s): 27 43 43.0 **h. Long. (dddmmss.s):** -081 59 23.0

i. Lat/Long Method: I1 Interpolation - Map

j. Lat/Long Description: CE Center of Facility

1.6 Owner or Operator:

a. Name: Tampa Electric Company

b. Phone: (813) 228-1111

Mailing address:

c. Street 1: P.O. Box 111 **d. Street 2:**

e. City: Tampa **f. State:** FL **g. Zip:** 33601 - 0111

1.7 Name and title of person or position responsible for part 68 (RMP) implementation:

a. Name of person: Charles Shelnut

b. Title of person or position: General Manager

1.8 Emergency contact:

a. Name: David R. Knapp

b. Title: Principal Engineer

c. Phone: (813) 228-1111

d. 24-hour phone: (941) 428-1405

e. Ext. or PIN: 39109

1.9 Other points of contact:

a. Facility or Parent Company E-Mail Address:

b. Facility Public Contact Phone: (813) 228-4111

c. Facility or Parent Company WWW Homepage Address: www.teco.net/TampaElectric.html

1.10 LEPC: District 7 LEPC

1.11 Number of full time employees on site: 75

1.12 Covered by:

a. OSHA PSM: Yes

b. EPCRA 302: Yes

c. CAA Title V: Yes Air Operating Permit ID: 1050233-001-AV

1.13 OSHA Star or Merit Ranking: No

1.14 Last Safety Inspection (by an External Agency) Date: 06/16/1999

1.15 Last Safety Inspection Performed by an External Agency: Fire Department

1.16 Will this RMP involve predictive filing?: No

Section 1.17 Process(es)

a. Process ID: 1 Program Level 1 Gasification Process

b. NAICS Code

22111 Electric Power Generation

c. Process Chemicals

c.1 Chemical Name	c.2 CAS Nr.	c.3 Qty (lbs.)
Hydrogen	1333-74-0	23,000

Section 2. Toxics: Worst Case --- No Data To Report

Section 3. Toxics: Alternative Release --- No Data To Report

Section 4. Flammables: Worst Case

Flammables: Worst Case ID: 1

4.1 Chemical Name: Hydrogen

4.2 Model used: EPA's OCA Guidance Reference Tables or Equations

4.3 Scenario: Vapor Cloud Explosion

4.4 Quantity released: 23,000 lbs

4.5 Endpoint used: 1 PSI

4.6 Distance to Endpoint: 0.30 mi

4.7 Estimated residential population within distance to endpoint: 0

4.8 Public receptors within distance to endpoint:

a. Schools:	No	d. Prisons/Correction facilities:	No
b. Residences:	No	e. Recreation areas:	No
c. Hospitals:	No	f. Major commercial, office, or industrial areas:	No

g. Other (Specify):

4.9 Environmental receptors within distance to endpoint:

a. National or state parks, forests, or monuments: No

b. Officially designated wildlife sanctuaries, preserves, or refuges: No

c. Federal wilderness areas: No

d. Other (Specify):

4.10 Passive mitigation considered:

a. Blast walls: No

b. Other (Specify):

4.11 Graphic file name:

Section 5. Flammables: Alternative Release --- No Data To Report

Section 6. Accident History --- No Data To Report

Section 7. Prevention Program 3 --- No Data To Report

Section 8. Prevention Program 2 --- No Data To Report

Section 9. Emergency Response

9.1 Written Emergency Response (ER) Plan:

a. Is facility included in written community emergency response plan? Yes

b. Does facility have its own written emergency response plan? Yes

9.2 Does facility's ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)? Yes

9.3 Does facility's ER plan include procedures for informing the public and local agencies responding to accidental releases? Yes

9.4 Does facility's ER plan include information on emergency heath care? Yes

9.5 Date of most recent review or update of facility's ER plan: 06/16/1999

9.6 Date of most recent ER training for facility's employees: 05/28/1999

9.7 Local agency with which facility's ER plan or response activities are coordinated:

a. Name of agency: Polk County Fire Department

b. Telephone number: (813) 534-0380

9.8 Subject to:

a. OSHA Regulations at 29 CFR 1910.38: Yes

b. OSHA Regulations at 29 CFR 1910.120: Yes

c. Clean Water Act Regulations at 40 CFR 112: Yes

d. RCRA Regulations at 40 CFR 264, 265, and 279.52: Yes

e. OPA-90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: Yes

f. State EPCRA Rules or Laws: Yes

g. Other (Specify):

Executive Summary

Tampa Electric Company (TEC) is an investor-owned electric utility which serves west-central Florida, primarily Hillsborough County and portions of Polk, Pasco, Pinellas, and Highlands Counties. In addition to other generating facilities, TEC owns and operates Polk Power Station, a nominal 260-megawatt electric generating facility located near Mulberry in southwest Polk County. The "Integrated Gasification Combined-Cycle" facility is a first-of-its-kind combination of two leading technologies. The first technology is called coal gasification which uses coal to create a clean-burning gas. The second technology is "combined cycle" which is the most efficient method of producing electricity commercially available today. The integration of these technologies allows TEC to couple the high efficiency of the combined cycle design with the low cost of coal for fuel.

The gasification portion of the plant produces a clean coal gas which fuels a combustion turbine. Coal is combined with oxygen in the gasifier to produce the gaseous fuel. The gas is then cleaned by a "gas cleanup" process. After cleaning the coal gas is used in the combustion turbine to produce electricity. The coal gas is a mixture of hydrogen and carbon monoxide at concentrations ranging from 65% to 85% by volume.

The requirements of the chemical accident release prevention rule (40 CFR Part 68) apply to the hydrogen present in the gasification process. Under the threshold determination criteria, if a flammable substance is present in a process in a mixture in concentrations of greater than 1 percent by weight, the weight of the entire mixture is considered in determining the quantity of that particular flammable substance present in the process. The gasification process contains 646 pounds of hydrogen and 22,108 pounds of wet gas at any one time, or a hydrogen concentration of 3 percent by weight. Because the concentration of hydrogen is greater than 1 percent by weight, and because the 22,108 pound weight of the entire mixture is greater than the threshold trigger of 10,000 pounds, the gasification process is subject to the chemical accident prevention rule.

An offsite consequence analysis was conducted for the gasification process to determine if the distance to the flammable endpoint for the worst-case release is less than the distance to any public receptor. This offsite consequence analysis was conducted using EPA's RMP Offsite Consequence Analysis Guidance document. Based on the EPA guidance document, the end point for a worst-case hydrogen vapor cloud explosion of the gasification process is no more than 0.3 mile from the gasifier. Because a circle of radius 0.3 mile centered on the gasifier is completely contained within TEC property, the offsite consequence analysis for a hydrogen release from the gasification process indicates that distance to the flammable endpoint for the worst-case release is less than the distance to any public receptor. On this basis, the hydrogen in the gasification process is classified as Program 1 given that no accidental releases of hydrogen have occurred for the previous 5 years and that emergency response procedures have been coordinated between Polk Power Station and the local emergency response organization.

Polk Power Station is committed to the safety to its employees and neighboring community. This commitment is based on established health and safety policies and procedures. These procedures are complemented by personnel training, safety drills, and facility inspections. A process safety management (PSM) program has been implemented at Polk Power Station which includes provisions for management of coal gas process hazards. The PSM program includes evaluations of process design, process technology, operational and maintenance activities and procedures, emergency preparedness plans and procedures, training programs, and other elements which impact the process. With a combination of appropriate safety design measures, preventative maintenance programs, and development and implementation of proper safety procedures, Polk Power Station manages the risk associated with coal gas handling at the facility.

In the event of an emergency at the facility, emergency response has been coordinated with the local emergency response organization. In addition, Polk Power Station has established and implemented a PSM emergency response plan in the event of an accidental hazardous materials release, natural hazards, or other potential emergencies. The plan addresses potential emergencies identified by a facility-wide risk analysis conducted by a team of environmental professionals, health and safety specialists, and Polk Power Station personnel. The plan identifies specific responsibilities and procedures to be followed by all facility personnel following an accident or impending emergency to maximize employee and community safety.

In summary, the offsite consequence analysis for a worst-case release of hydrogen, using EPA's OCA Guidance model, from the gasification process at Polk Power Station indicates that the distance to the flammable endpoint is completely contained within TEC property. In response to TEC's commitment to

community and employee safety, risks associated with the process are managed by providing carefully established health and safety policies and procedures and implementation of process safety procedures. In the event of a release, emergency planning has been conducted and includes coordination with the local emergency response organization.

RMP Validation Errors --- No Data To Report

ATTACHMENT A-8—
FUEL ANALYSES

Synthetic Gas Analysis

TECO TAMPA ELECTRIC

Synthetic Gas and Heating Value Calculations

Customer: Tampa Electric Compan Sample ID: Polk Lab

Facility: Polk Power Station Analysis Date: 02/05/2004

Source: Unit #1

CALCULATION OF DENSITY AND HEATING VALUE @ 60°F and 30 in Hg

Component	% Volume	Molecular Wt.	Density * (lb/ft^3)	% volume x Density	weight %	Component Gross Btu/lb	Weight Fract. Btu	Gross * Heating Value (Btu/SCF)	Volume Fract. Btu
Hydrogen	34.0400	2.016	0.0053	0.00180	3.1493	61100	1924.24	325.0	110.63
Oxygen	0.8900	32.000	0.0846	0.00075	1.3144	0	0.00	0.0	0
Nitrogen	5.6400	28.016	0.0744	0.00420	7.3250	0	0.00	0.0	0
CO2	15.2700	44.010	0.1170	0.01787	31.1873	0	0.00	0.0	0
CO	44.0900	28.010	0.0740	0.03263	56.9541	4347	2475.80	322.0	141.9698
Methane	0.0300	16.041	0.0424	0.00001	0.0222	23879	5.30	1013.0	0.3039
Ethane		30.067	0.0803	0.00000	0.0000	22320	0.00	1792.0	0
Ethylene		28.051	0.0746	0.00000	0.0000	21644	0.00	1614.0	0
Propane		44.092	0.1196	0.00000	0.0000	21661	0.00	2590.0	0
propylene		42.077	0.1110	0.00000	0.0000	21041	0.00	2336.0	0
Isobutane		58.118	0.1582	0.00000	0.0000	21257	0.00	3363.0	0
n-butane		58.118	0.1582	0.00000	0.0000	21308	0.00	3370.0	0
Isobutene		56.102	0.1480	0.00000	0.0000	20730	0.00	3068.0	0
Isopentane		72.144	0.1904	0.00000	0.0000	21052	0.00	4008.0	0
n-pentane		72.144	0.1904	0.00000	0.0000	21091	0.00	4016.0	0
n-hexane		86.169	0.2274	0.00000	0.0000	20940	0.00	4762.0	0
H2S	0.0300	34.076	0.0911	0.00003	0.0477	7100	3.39	647.0	0.1941
Total:	99.99		Average Density	0.05729	100.0000				
			Specific Gravity	0.74883					

Gross Heating Value			
Btu/lb	4409	Btu/SCF	253.10

* Density (lb/ft^3) and Gross Heating Value (Btu/scf) data from Perry's Chemical Engineering Handbook.

TECO TAMPA ELECTRIC

Synthetic Gas and Heating Value Calculations

Customer: Tampa Electric Compa
Facility: Polk Power Station
Source: Unit #1

Sample ID: Polk Lab
Analysis Date: 02/05/2004

CALCULATION OF F FACTORS

Componen	Mol. Wt.	C Factor	H Factor	% volume	Fract. Wt.	Weight Percents			
						Carbon	Hydrogen	Nitrogen	Oxygen
Hydrogen	2.016	0	1	34.040	68.6246		3.1717628		
Oxygen	32.000	0	0	0.890	28.4800				1.3163173
Nitrogen	28.016	0	0	5.640	158.0102			7.303076556	
CO2	44.010	0.272273	0	15.270	672.0327	8.45698583			22.581118
CO	28.010	0.42587	0	44.090	1234.9609	24.3080923			32.80311
Methane	16.041	0.75	0.25	0.030	0.4812	0.01668148	0.0055605		
Ethane	30.067	0.8	0.2	0.000	0.0000	0	0		
Ethylene	28.051	0.85714	0.14286	0.000	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.000	0.0000	0	0		
Propene	42.077	0.85714	0.14286	0.000	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.000	0.0000	0	0		
n-butane	58.118	0.82759	0.17247	0.000	0.0000	0	0		
Isobutene	56.102	0.85714	0.14286	0.000	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.000	0.0000	0	0		
n-pentane	72.144	0.83333	0.16667	0.000	0.0000	0	0		
n-hexane	86.169	0.83721	0.16279	0.000	0.0000	0	0		
H2S	34.076	0	0.0586923	0.030	1.0223	0	0.0027731		
Totals				99.99000	2163.6120	32.7817596	3.18	7.303076556	56.700546

CALCULATED VALUES		
O2 F Factor (dry), Fd	**8318**	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O2 F Factor (wet), Fw	**9710**	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	**1392**	SCF of Water/MM Btu of Fuel Burned @ 0% excess air
Combust. Moisture	**14.34**	volume % water in flue gas @ 0% excess air
CO2 F Factor, Fc	**2387**	DSCF of CO2/MM Btu of Fuel Burned @ 0% excess air
Carbon Dioxide	**28.69**	volume % CO2 in flue gas @ 0% O2
Predicted Fo Factor	**0.73**	EPA Method 3a Fo value

Natural Gas Analysis

TECO
TAMPA ELECTRIC

Natural Gas and Heating Value Calculations

Client Polk Power Station Unit 2
Sample ID FGT Perry Stream #2
Date 02/12/2003

CALCULATION OF F FACTORS

						Weight Percents			
Compone	**Mol. Wt.**	**C Factor**	**H Factor**	**% volume**	**Fract. Wt.**	**Carbon**	**Hydrogen**	**Nitrogen**	**Oxygen**
Hydrogen	2.016	0	1	0.000	0.0000		0		
Oxygen	32.000	0	0	0.000	0.0000				0
Nitrogen	28.016	0	0	0.374	10.4780			0.612650699	
CO2	44.010	0.272273	0	0.961	42.2936	0.673309			1.7978124
CO	28.010	0.42587	0	0.000	0.0000	0			0
Methane	16.041	0.75	0.25	94.974	1523.4779	66.80864	22.269547		
Ethane	30.067	0.8	0.2	2.692	80.9404	3.786085	0.9465212		
Ethylene	28.051	0.85714	0.14286	0.000	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.577	25.4411	1.217082	0.2704629		
Propene	42.077	0.85714	0.14286	0.000	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.146	8.4852	0.410595	0.0855682		
n-butane	58.118	0.82759	0.17247	0.126	7.3229	0.354349	0.0738465		
Isobutene	56.102	0.85714	0.14286	0.000	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.048	3.4629	0.168731	0.0337469		
n-pentane	72.144	0.83333	0.16667	0.030	2.1643	0.105457	0.0210918		
n-hexane	86.169	0.83721	0.16279	0.072	6.2042	0.303706	0.0590536		
H2S	34.076	0	0.058692	0.000	0.0000	0	0		
Totals				100.00000	1710.2705	73.82795	23.76	0.612650699	1.7978124

CALCULATED VALUES		
O2 F Factor (dry), Fd	**8644**	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O2 F Factor (wet), Fw	**10639**	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	**1995**	SCF of Water/MM Btu of Fuel Burned @ 0% excess air
Combust. Moisture	**18.75**	volume % water in flue gas @ 0% excess air
CO2 F Factor, Fc	**1031**	DSCF of CO2/MM Btu of Fuel Burned @ 0% excess air
Carbon Dioxide	**11.93**	volume % CO2 in flue gas @ 0% O2
Predicted Fo Factor	**1.75**	EPA Method 3a Fo value

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daily chromatograph

date requested: Feb 12 2003 10:14AM

Date/Time: Feb 12 2003 10:14AM Retrieve

The data contained herein is preliminary data and therefore should be used for contemporaneous operational purposes only and may be subject to change at month end. This data is provided to assist our customers in tracking their gas usage as closely as possible on a real-time basis. The information contained on this web page is not to be considered billable information. This data will be subject to additional verification and possible modification prior to billing.

Chromatograph Report

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Id	Name	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6:	C7	H2	Helium	Oxygen	Date
8001	MAINLINE (BROOKER)	1042	0.975	0.328	0 592	95.033	2.639	0 601	0 153	0.130	0.049	0 029	0.064	0	0	0	0	02/12/2
8002	CLARKE-MOBILE (ON-LINE)	1043	0.989	0 257	0 592	0	0	0	0	0	0	0	0	0	0	0	0	02/10/2
8003	COKINOS/FGT TEXAS CITY	1030	1.109	0.317	0 586	96 076	1.769	0.357	0.119	0.078	0.041	0.025	0.054	0	0	0	0	02/04/2
8004	CSX RESIDUE (STR 1)	1047	0.550	0 208	0.587	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8009	ST.REGIS PT. RES	1105	0 055	6 100	0.678	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8012	ACADIA PARTNERS PIPELINE	1042	1.000	0 289	0.592	95 030	2 759	0 514	0 137	0 099	0.048	0 030	0.048	0.046	0	0	0	02/11/2
8013	CHEVRON JUDGE DIGBY	1017	2 160	0 241	0 504	95 572	1 408	0.217	0 098	0.051	0 055	0 022	0.088	0.088	0	0	0	02/11/2
8014	EXXON ESCAMBIA	1135	0 516	4 470	0 687	0	0	0	0	0	0	0	0	0	0	0	0	02/10/2
8016	FIVE FLAGGS	1041	1 003	0 288	0 591	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8017	HARDEE POWER-Stream #2	1044	0 994	0 283	0 592	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8020	FGT TO WINNIE PL (23952)	1025	1.213	0.289	0 584	0	0	0	0	0	0	0	0	0	0	0	0	02/12/2
[illegible]24	MOBIL GAS CITRONELLE (96250)	1059	1.059	0.212	0.603	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8025	EGAN HUB PARTNERS (DELIVERY)	1034	1.122	0 276	0 588	95 612	2.193	0.433	0.111	0.098	0 043	0.027	0.043	0.043	0	0	0	02/11/2
8026	EGAN HUB PARTNERS (DELIVERY)	1036	1.041	0 296	0 589	95 639	2.166	0.456	0 124	0.109	0.047	0.031	0.050	0 050	0	0	0	02/11/2
8030	PERRY STREAM #1	1042	1.001	0 278	0 591	95.174	2.493	0.613	0.160	0 131	0.049	0.029	0.072	0	0	0	0	02/12/2
8031	PERRY STREAM #2 (30")	1042	0 961	0 374	0 592	94 974	2.692	0.577	0 146	0.126	0 048	0.030	0.072	0	0	0	0	02/12/2
8032	WEST PALM	1044	0 962	0 416	0 593	94 672	2.897	0.627	0 153	0 132	0.048	0 029	0 064	0	0	0	0	02/12/2
8033	GAINESVILLE LAB	1042	0 983	0 308	0 591	95.112	2.565	0.607	0.155	0 130	0.049	0.029	0.083	0	0	0	0	02/12/2
8034	OLIN APC	1041	0 864	0 312	0 589	95 340	2 610	0 500	0 119	0.106	0 045	0 028	0.038	0.038	0	0	0	02/11/2
8035	UNITED ST. HELENA BI-DIR (0024806)	1040	1 343	0 441	0 598	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8036	ALA. ELECTRIC (0094450)	1041	0 995	0 279	0 591	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8037	Lab @ station 12 (36)	1042	1 012	0.286	0.592	95.130	2.515	0 612	0.160	0 131	0.050	0.026	0.078	0	0	0	0	02/12/2
8038	Lab @ station 12 (30)	1043	0.983	0 367	0 593	94.823	2.799	0.577	0.147	0.126	0.049	0.029	0.082	0	0	0	0	02/12/2
8039	Mobile Bay Chrom	1071	1.185	0.229	0.613	92.487	3.960	1.305	0.338	0.272	0.080	0 038	0.080	0	0	0	0	02/12/2
8040	Gulfstream Hardee Interconnect	1041	0.682	0 271	0 585	95.090	3.445	0.357	0.059	0.055	0.016	0.009	0.008	0	0	0	0	02/11/2
8041	Mirant - Shady Hills	1044	0 891	0 317	0 592	94 860	2.942	0 586	0 146	0.122	0.030	0.049	0.030	0.026	0	0	0	02/11/2
8042	Vandolah	1042	0 964	0 327	0 591	95.027	2.743	0 552	0.126	0 108	0.022	0 031	0.054	0.048	0	0	0	02/11/2
8043	FPL/FT MYERS	1040	1.005	0 280	0 591	0	0	0	0	0	0	0	0	0	0	0	0	02/11/2
8044	PROGRESS DESOTO	1040	0 924	0 310	0 589	95 176	2.750	0 507	0 112	0 097	0.023	0.038	0.032	0.028	0	0	0	02/11/2
8045	ANR ST LANDRY	1022	0 635	0 348	0 573	97 010	1.576	0.080	0 013	0 012	0.007	0 005	0	0	0	0	0	02/11/
8047	Gulfstream Osceola	1040	0 738	0 264	0 586	95 131	3 343	0 342	0 069	0 064	0.019	0.011	0.010	0	0	0	0	02/11/
8048	Destec Lateral-Stream #1	1044	1 002	0 286	0 593	95.159	2.505	0 608	0.158	0 131	0.049	0.028	0.073	0	0	0	0	02/12/
8049	CUC St Cloud	1043	0.970	0 355	0 592	94.966	2.685	0 590	0 149	0 127	0.046	0 029	0.082	0	0	0	0	02/12/
8050	St Pete Reedy Creek	1041	0.977	0 325	0 591	95 086	2.618	0.591	0.135	0 129	0.039	0.024	0.076	0	0	0	0	02/12/
8051	St Pete Osceola	1042	0 985	0 312	0 592	95 083	2.584	0.597	0.153	0.132	0.049	0.026	0 078	0	0	0	0	02/12/
[illegible]52	Seminole Payne Creek (Online)	1041	0.993	0 278	0 591	95 216	2,480	0 601	0 157	0 131	0 048	0 026	0.035	0.035	0	0	0	02/11/
[illegible]53	NGPK CHECK METER (94453)	1034	1 273	0 350	0 592	95 176	2 366	0 448	0 120	0 102	0.048	0.030	0.043	0.043	0	0	0	02/11/
8054	BARTOW	1041	1 000	0 287	0 591	95 216	2 459	0 602	0 156	0 128	0.047	0 026	0 078	0	0	0	0	02/12

8056	Teco/Polk	1040	0.962	0.314	0.590	95.164	2.823	0.552	0.133	0.115	0.043	0.024	0.034	0.034	0	0	0	02/10/20
8057	West Leg - Lee County GC	1040	1.007	0.281	0.591	95.224	2.492	0.591	0.154	0.126	0.046	0.025	0.055	0	0	0	0	02/12/20
8069	Texas Gas Eunice (8069) Delivery	1044	1.164	0.277	0.595	0	0	0	0	0	0	0	0	0	0	0	0	01/15/20
8088	Tejas Vidor Meter Station	1037	1.170	0.315	0.591	0	0	0	0	0	0	0	0	0	0	0	0	01/27/20
8094	BAY GAS BI-DIRE DELIVERY (93927)	1041	0.823	0.346	0.588	0	0	0	0	0	0	0	0	0	0	0	0	02/12/20
8095	BAY GAS STORAGE RECEIPT (23927) BI-DIREC	1043	0.809	0.342	0.589	0	0	0	0	0	0	0	0	0	0	0	0	02/12/20
8096	TEXAS GAS EUNICE (24189) O/L	1032	1.127	0.448	0.589	0	0	0	0	0	0	0	0	0	0	0	0	02/05/20
8097	TRANSCO VINTON	1051	1.496	0.209	0.604	0	0	0	0	0	0	0	0	0	0	0	0	02/13/20
8098	GSU Calcasieu (0094141)	1033	1.231	0.265	0.589	95.750	1.857	0.459	0.144	0.102	0.050	0.031	0.056	0.056	0	0	0	02/11/20
8099	STATION 8	1034	1.177	0.337	0.590	95.549	2.074	0.427	0.121	0.098	0.049	0.030	0.130	0	0	0	0	02/12/20
9000	Mid La Gas System	1050	0.687	0.275	0.591	0	0	0	0	0	0	0	0	0	0	0	0	02/11/20
9034	TIVOLI NNG AT 14 73	1032	0.410	0.342	0.577	97.069	1.435	0.361	0.130	0.083	0.049	0.029	0.089	0	0	0	0	01/10/20

Fuel Oil Analysis

TECO TAMPA ELECTRIC **Laboratory Services**
5012 Causeway Blvd • Tampa Fl. 33619 • Ph (813)630-7378 • Fax (813)630-7360 • DOH #E54272

[redacted]rt For: Fuel Data Coord., Envir. Plan.
Stack Test Coord., Air Programs

Report Date: 03/02/04

Laboratory ID: AA73238

Sample Information

Location Code: PK-STK-1
Description: Polk Power, Stack Test, Unit 1
Project Account Code:
Sample Collection Method:

Sampled By: POLK
Date Collected: 02/21/04
Time Collected: 11:00:00 AM
Date of Sample Receipt: 02/24/04

Laboratory Results

Parameter	Result	Units	MDL	Analyst	Qualifier Code	Lower Limit	Upper Limit	Violation Check
API Gravity @ 60 Deg. F	34.0	Degrees API	0.1	MM				
Fuel Bound Nitrogen in Liquid Petroleum	178	ppm		CB1				
Gross Heat of Combustion, Oils, (HHV)	19383	BTU/Lb.	1	MM				
Gross Heat of Combustion, Oils, (HHV)	137988	BTU/Gal.	1	MM		129811		
Net Heat of Combustion, Oils, (LHV)	18197	BTU/Lb.	1	MM				
[redacted]ds / Gallon @ 60 Deg. F	7.119	Lbs./Gal.	0.001	MM			9.5	
[redacted]ds SO2 / Million BTU, Oil	0.04074	Lbs. SO2/MMBTU		MM				
Relative Density 60/60 Deg. F	0.8550		0.0001	MM			0.876	
Sulfur in Petroleum Products	0.04	%	0.01	EMD	I		0.05	
Carbon, Hydrogen, and Nitrogen in Oil								
Carbon	87.4	%	0.1	CMS				
Hydrogen	13.0	%	0.1	CMS				
Nitrogen	see F.B. N2	%	0.1	CMS				

Comments:

All results calculated on a wet to wet basis. unless otherwise indicated.

Data Qualifier Codes Explanation:

I - The reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL). PQL = 4 x MDL.

Subcontracted Laboratories:

CB1 - Caleb Brett

Robert Dorey,
Manager, Laboratory Services

[redacted]aboratory Services certifies that the test results in this report meet all requirements of the NELAC standards, unless indicated otherwise in the body of the report.

Intertek Testing Services
Caleb Brett

Report of Analysis

Lab Number:	2004-0139	Customer Reference:	
Job Number:	T4022118	Our Reference:	T402-2118
Date Sampled:	02/21/04		
Date Submitted:	02/24/04	To:	Tampa Electric Company
Date Tested:	02/25/04		
Product:	*No. 2 Fuel Oil*	By:	TECO Laboratory
Taken From:	AA73238		
Location:	TECO, Laboratory		
Sample Tested:	Polk Power, Stack Test, Unit 1 Submitted Sample		

Test	Method	Result	Unit
Nitgoen Content	ASTM D5762	178	ppm

Daniel Thompson
ITS/Caleb Brett

ATTACHMENT A-9—
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT A-9
CONTROL EQUIPMENT DESCRIPTION

Descriptions of Polk Power Station's permitted emission units and the emission control systems associated with their operation is provided as follows:

EU001: 260 MW Combined Cycle Combustion Turbine (CCCT)
This emission unit is capable of firing syngas or No. 2 fuel oil. The following control systems are associated with the operation of the CCCT:

- Nitrogen diluent injection and syngas moisture saturation for control of nitrogen oxides (NO_x) during syngas firing, and
- Water injection for NO_x control during fuel oil firing.

The air separation unit produces nitrogen for use in the CCCT, and oxygen for use in the solid fuel gasification system. The nitrogen diluent injection system and syngas moisture saturation controls NO_x emissions by reducing the flame temperature in the combustion turbine. It also serves a secondary purpose of increasing the fuel mass flow of the relatively low heat content syngas in order to increase the power output of the CCCT.

EU003: Auxiliary Boiler
The oil-fired auxiliary boiler only operates during startup and shutdown of the combined cycle unit, or when steam from the heat recovery steam generation system is unavailable. This emission unit fires low sulfur No. 2 fuel oil exclusively and is equipped with exhaust gas recirculation (EGR) for control of NO_x emissions.

EU004: Sulfuric Acid Plant
The sulfuric acid plant removes sulfur from the syngas stream before it is combusted in the CCCT. The sulfuric acid plant employs mist eliminators for control of sulfuric acid mist emissions.

EU005: Solid Fuel Handling System
This emissions unit includes all solid fuel (e.g., coal and petroleum coke) handling facilities, including unloading, storage, conveyor transfers, and grinding. Particulate emissions (PM) are controlled by the following active control devices:

- Silo No. 1 bin vent baghouse,
- Silo No. 2 bin vent baghouse,
- Silo feed to belt conveyor baghouse, and
- Belt conveyor to grinding tower day bin transfer baghouse.

The dust collection equipment consists of pulse jet baghouses, centrifugal exhaust fans, rotary air lock valves, dust return chutes, and system control devices. The baghouses are sized for a maximum air to cloth ration of six to one at design air flow and have a PM removal efficiency of not less than 99.9 percent.

ATTACHMENT A-9
CONTROL EQUIPMENT DESCRIPTION

EU006: Solid Fuel Gasification System
This system converts solid fuel (coal or coal blends of up to 60% petroleum coke and 40% bituminous coal) into syngas fuel for combustion in the CCCT. An emergency flare is the only control device associated with the coal gasification process. The emergency flare only operates during gasifier startups and shutdowns, and during infrequent, unanticipated interruptions of the gasifier's operating cycles. On a routine basis, emissions from the flare result from the pilot flame and are negligible.

EU007: Emergency Generators
This emission unit consists of one or more emergency generators having a total aggregate fuel consumption of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used. There is no control equipment associated with the operation of these emission sources.

EU008: Heating Units and General Purpose Internal Combustion Engines
This emission unit consists of one or more heating units and general purpose internal combustion engines having a total aggregate fuel consumption of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used. There is no control equipment associated with the operation of these emission sources.

EU009 & 010: 165 MW Simple Cycle Combustion Turbine (SCCT)
These emission units are capable of firing natural gas or No. 2 fuel oil. The following control systems are associated with the operation of the CCCT:

- Dry low NO_x combustors for natural gas firing
- Water injection for fuel oil firing

The dry low NO_x combustor is inherent to the combustion process during natural gas-firing. Water injection results in a lower flame temperature, thus resulting in lower NO_x emissions during fuel oil-firing.

ATTACHMENT A-10—
PROCEDURES FOR STARTUP AND SHUTDOWN

Polk Power Station

Procedures for Startup & Shutdown of the Unit #1

A. Startup

1. The Gas Turbine Generator (GTG) start is initiated by an operator. The start sequence performs the following steps automatically:
    a. A load commutating inverter raises the GTG speed to approximately 25% for a purge.
    b. The GTG is fired on distillate fuel and speed is increased to synchronous speed.
    c. The generator breaker closes automatically and the GTG is loaded to spinning reserve.

2. The operator increases GTG load to at least 25% on Unit #1.

3. The GTG is then operated to meet system demand.

4. For syngas operation Unit #1, load is placed near 45% and transferred to syngas.

5. The GTG is then operated to meet system demand.

B. Shutdown

1. On Unit #1, the operator decreases GTG load to near 45%; the GTG is then transferred to distillate fuel.

2. The operator decreases GTG load to spinning reserve.

3. The operator initiates a shutdown on the GTG. The shutdown sequence performs the following steps automatically:
    a. The GTG load is reduced to 0%, and the generator breaker opens automatically.
    b. The GTG speed is reduced by reducing fuel until minimum firing speed is obtained.
    c. Fuel is secured to the GTG.
    d. The GTG coasts down until it reaches turning gear speed.

Polk Power Station

Auxiliary Boiler Start-up and Shutdown Procedures

Procedures for startup and shutdown of the Auxiliary Steam Boiler are as follows:

A. STARTUP

1. An operator initiates a start on the Auxiliary Boiler. The Auxiliary Boiler automatically purges.

2. After the purge, an operator initiates controls to ignite the diesel fuel to establish the main flame.

3. The boiler's controls automatically modulate the main flame to maintain operating steam pressure.

B. SHUTDOWN

1. An operator initiates a shutdown of the Auxiliary Boiler.

2. The Auxiliary Boiler fuel supply is shut-off extinguishing the flame. Next, the auxiliary boiler is purged and shutdown.

Polk Power Station

Sulfuric Acid Plant Start-up and Shutdown Procedures

Procedures for startup and shutdown of the Sulfuric Acid Plant are as follows:

A. STARTUP

1. The Sulfuric Acid Plant is started to coincide with the availability of acid gas form the gasifier.

2. The Sulfuric Acid Plant Decomposition Furnace and Converter are purged and preheated with independent propane fired burners.

3. When the Decomposition Furnace and the Converter have reached their respective operating temperatures and acid gas is available from the gasifier, the acid gas is introduced into the Decomposition Furnace. As the acid gas is admitted, the Decomposition Furnace propane fired burner is secured.

4. As the Converter becomes self-sustaining after introduction of the acid gas, its propane fired burner is secured.

B. SHUTDOWN

1. When acid gas from the gasifier is no longer available, the Sulfuric Acid plant is shutdown.

2. The acid gas to the Sulfuric Acid Plant supply is shut-off. This extinguishes the flame in the Decomposition Furnace. The Decomposition Furnace and the Converter are then purged and shutdown.

Polk Power Station

Procedures for Startup & Shutdown of the Unit #2 & #3

A. Startup

1. The Gas Turbine Generator (GTG) start is initiated by an operator. The start sequence performs the following steps automatically:
    a. A load commutating inverter raises the GTG speed to approximately 25% for a purge.
    b. The GTG is fired on natural gas or distillate fuel and speed is increased to synchronous speed.
    c. The generator breaker closes automatically and the GTG is loaded to spinning reserve.

2. The operator increases GTG load to at least 50%.

3. The GTG is then operated to meet system demand.

B. Shutdown

1. The operator decreases GTG load to spinning reserve.

2. The operator initiates a shutdown on the GTG. The shutdown sequence performs the following steps automatically:
    a. The GTG load is reduced to 0%, and the generator breaker opens automatically.
    b. The GTG speed is reduced by reducing fuel until minimum firing speed is obtained.
    c. Fuel is secured to the GTG.
    d. The GTG coasts down until it reaches turning gear speed.

ATTACHMENT A-11—
ALTERNATIVE METHODS OF OPERATION

Tampa Electric Company – Polk Power Station
Emission Unit 001: Alternate Methods of Operation

Method No.	Combined Cycle	Syngas Firing	Distillate Fuel Oil Firing	Annual Operating Hours (Hrs/Yr)
1	✔	✔		8,760
2	✔		✔	≤ 876

Source: TEC, 2003.

Tampa Electric Company – Polk Power Station
Emission Units 009 and 010: Alternate Methods of Operation

Method No.	Combined Cycle	Syngas Firing	Distillate Fuel Oil Firing	Annual Operating Hours (Hrs/Yr)
1	✔	✔		8,760
2	✔		✔	$\leq$ 876

Source: TEC, 2003.

ATTACHMENT A-12—
ACID RAIN CERTIFICATION OF REPRESENTATION

EPA

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24

This submission is: ☐ New ☒ Revised (revised submissions must be complete; see instructions)

STEP 1
Identify the source by plant name, State, and ORIS Code.

Plant Name	State	ORIS Code
Polk Power Station	**FL**	**7242**

STEP 2
Enter requested information for the designated representative.

Gregory M. Nelson Name	
Address **P.O. Box 111** **Tampa, Florida 33601**	
(813) 228-1763 Phone Number	**(813) 228-1308** Fax Number
gmnelson@tecoenergy.com E-mail address (if available)	

STEP 3
Enter requested information for the alternate designated representative, if applicable.

Laura R. Crouch Name	
(813) 228-4104 Phone Number	**(813) 228-1308** Fax Number
lrcrouch@tecoenergy.com E-mail address (if available)	

STEP 4: Complete Steps 5 and 6, read the certifications, sign and date.

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the 'designated representative' for the affected source and each affected unit at the source identified in this certificate or representation, in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

The agreement by which I was selected as the alternate designated representative, if applicable, includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

Polk Power Station
Plant Name (from Step 1)

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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 (designated representative) [signature]	Date 4/19/04
Signature (alternate designated representative) [signature]	Date 4/21/04

STEP 5
Provide the name of every owner and operator of the source and identify each affected unit they own and/or operate.

Tampa Electric Company Name					[X] Owner	[X] Operator
**1 ID#	002 ID#	003 ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					[ ] Owner	[ ] Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					[ ] Owner	[ ] Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

STEP 6
For any new affected units listed at STEP 5 that have not commenced commercial operation, enter the projected date on which the unit is expected to commence commercial operation.

ID#	Projected Commence Commercial Operation Date:
ID#	Projected Commence Commercial Operation Date:
ID#	Projected Commence Commercial Operation Date:
ID#	Projected Commence Commercial Operation Date:

ATTACHMENT A-13—
ACID RAIN PART (FORM NO. 62-210.900(1)(a))

Acid Rain Program
Instructions for
Acid Rain Part Application
(40 CFR 72.30 - 72.31 and Rule 62-214.320, F.A.C.)

The Acid Rain Program requires the designated representative to submit an Acid Rain part application for each source with an Acid Rain unit. A complete Certificate of Representation must be received by EPA before the part application is submitted to the title V permitting authority. A complete Acid Rain part application, once submitted, is binding on the owners and operators of the Acid Rain source and is enforceable in the absence of an Acid Rain part until the title V permitting authority either issues an Acid Rain part to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the title V permitting authority.

STEP 1 Use the plant name and ORIS Code listed on the Certificate of Representation for the plant. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If no code has been assigned or if there is uncertainty regarding what the code number is, contact EIA at (202) 287-1730 (for ORIS codes), or (202) 287-1927 (for facility codes).

STEP 2 For column "a," identify each Acid Rain unit at the Acid Rain source by providing the appropriate unit identification numbers, consistent with the unit identification numbers entered on the Certificate of Representation and with unit identification numbers used in reporting to DOE and/or EIA. For new units without identification numbers, owners and operators may assign such numbers consistent with EIA and DOE requirements.

For columns "c" and "d," enter the commence operation date(s) and monitor certification deadline(s) for new units in accordance with 40 CFR 72.2 and 75.4, respectively.

Submission Deadlines

For new units, an initial Acid Rain part application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid rain part renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: ☐ New ☒ Revised

STEP 1
Identify the source by plant name, State, and ORIS code

Plant Name	**Polk Power Station**	State	**FL**	ORIS Code	**7242**

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." For new units, enter the requested information in columns "c" and "d."

a Unit ID#	b Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	c New Units Commence Operation Date	d New Units Monitor Certification Deadline
**1	Yes		
002	Yes		
003	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Polk Power Station

Plant Name (from Step 1)

STEP 3
Read the standard requirements

Acid Rain Part Requirements

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
(ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
(2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and
(ii) Have an Acid Rain Part.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain 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 prior to the end of 5 years, in writing by the EPA or the Department:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; 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 changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 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 Acid Rain Program; and,

Polk Power Station

Plant Name (from Step 1)

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date

Certification

I 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.

Name	**Gregory M. Nelson**	
Signature	Gregory M. Nelson	Date 4/19/04

ATTACHMENT A-14—
REQUESTED CHANGES TO CURRENT TITLE V PERMIT

TITLE V AIR OPERATION PERMIT
FINAL PERMIT REVISION NO.: 1050233-012-AV
REQUESTED PERMIT CONDITION CHANGES

The proposed Title V permit condition changes address Unit 1 and associated units (e.g., the solid fuel gasification system and auxiliary boiler) at PPS, along with Units 2 and 3, which were included in the facility's Title V permit on June 24, 2003. A discussion of each requested permit condition change is provided in the following sections. This detailed discussion of the permit revision request is organized by each individual item. The basis for each request is presented, followed by supporting information for the request (e.g., pertinent guidance memoranda). Suggested permit language is also included for the Florida Department of Environmental Protection (FDEP) to use as a starting point for implementation of the change. For the most part, these requested modifications involve procedural issues, and do not affect the nature and character of the emissions from this facility. As such, this request is submitted as a permit revision in accordance with FDEP guidance. The page numbers indicated below are references to Title V FINAL Permit Revision No: 1050233-012-AV.

1.0 SO_2 EMISSIONS MONITORING STRATEGY (SOLID FUEL)

1.1 PROCESS DESCRIPTION

Fuel bound sulfur is primarily converted to hydrogen sulfide (H_2S) and carbonyl sulfide (COS) in the gasification process. The majority of the solid fuel sulfur species are removed from the syngas by the acid gas removal unit and the sulfuric acid plant, where the sulfur species are converted to sulfuric acid (H_2SO_4). The syngas will contain residual COS, H_2S, and possibly other sulfur compounds. After combustion of the syngas in the CT, the primary sulfur species in the exhaust is SO_2.

1.2 BASIS FOR REQUEST

Currently Conditions E.1 and E.5 of the PPS Title V permit require monitoring of the solid fuel sulfur content for the solid fuel gasification system (E.U. ID No. 006) on a once per unique fuel blend basis to assure compliance with the syngas SO_2 emission limits for the combined cycle combustion turbine (E.U. ID No. 001); reference Condition A.5. These emission limits result from the initial BACT analysis for the facility. In addition to these SO_2 emission limits, the PPS Title V permit also limits SO_2 emissions from the sulfuric acid plant (E.U. ID No. 004); reference Condition C.6. Performance tests to demonstrate compliance with the stated emission rates are required annually for both the CT and the sulfuric acid plant.

Because sulfur contained in the gasification process feedstock solid fuels is both converted to sulfuric acid and emitted to the atmosphere as SO_2, use of the feedstock solid fuel sulfur content and solid fuel input flow as a surrogate for SO_2 emissions is not as precise as direct measurement by CEMs. During the operation of this facility, TEC has demonstrated that CEMs is a viable approach (i.e., has successfully operated the units with minimal problems) for the direct measurement of CT SO_2 stack emissions. Therefore, TEC proposes to substitute CEMs as a compliance methodology for the surrogate parameter of gasification system feedstock solid fuel sulfur content. Since the majority of the SO_2 emissions occur at the CT, TEC proposes that the SO_2 emissions be monitored by the CT's CEMs, while maintaining the current annual compliance strategy for the sulfuric acid plant SO_2 emissions limit.

1.3 SUGGESTED PERMIT LANGUAGE

Condition E.1. of the Emission Unit ID No. 006 Solid Fuel Gasification System describes the permitted capacity of the emissions unit, and includes a fuel sulfur content limit as follows:

TITLE V AIR OPERATION PERMIT
FINAL PERMIT REVISION NO.: 1050233-012-AV
REQUESTED PERMIT CONDITION CHANGES

E.1. Permitted Capacity. Solid fuels input to the solid fuel gasification plant shall consist of coal or coal/petroleum coke blends containing a maximum of 60.0 percent petroleum coke by weight. The maximum input of solid fuels to the solid fuel gasification plant shall not exceed 2,325 tons per day, on a dry basis. The maximum weight of the petroleum coke blended shall not exceed 1,395 tons per day, on a dry basis. The maximum sulfur content of the blended fuel shall not exceed 3.5 percent by weight.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-194(E)]

It is suggested that the last three sentences of this condition be removed as follows.

E.1. Permitted Capacity. Solid fuels input to the solid fuel gasification plant shall consist of coal or coal/petroleum coke blends containing a maximum of 60.0 percent petroleum coke by weight. ~~The maximum input of solid fuels to the solid fuel gasification plant shall not exceed 2,325 tons per day, on a dry basis. The maximum weight of the petroleum coke blended shall not exceed 1,395 tons per day, on a dry basis. The maximum sulfur content of the blended fuel shall not exceed 3.5 percent by weight.~~
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-194(E)]

Additionally, deletion of Condition E.3 and E.4 with a modification of Conditions A.23 and E.5 are requested as follows:

From:

A.23. The owner or operator may determine compliance with the sulfur dioxide standard by calculations based on the fuel analysis for sulfur content. Certified analyses by the appropriate test method from the fuel supplier is acceptable. See specific condition A.24.

[PSD-FL-194]

To:

A.23. The owner or operator may determine compliance with the 30-day rolling average sulfur dioxide emission standard in lb/hr by using the SO_2 CEM. In the event CEMs data are not available, ~~T~~the owner or operator may determine compliance with the sulfur dioxide emission standard by calculations based on the fuel analysis for sulfur content. To determine the compliance while firing No.2 fuel oil, a monthly fuel oil composite sample shall be prepared from daily fuel oil samples. The records shall contain, as a minimum, for each monthly composite sample, the sulfur content of the fuels, Btu content, and density of the fuel. Certified analyses by the appropriate test method from the fuel supplier is acceptable. See specific condition A.24.

[PSD-FL-194]

From:

E.5. Recordkeeping. Written or electronic records verifying that the coal/petroleum coke blends input to the solid fuel gasification system have not exceeded the 60.0 percent (1,395 tons per day) maximum petroleum coke by weight limit and the blended fuel sulfur content of 3.5 percent by weight limit specified by Specific Condition E.1., shall be maintained and submitted to the Department's Southwest District Office with each annual report. These records shall be generated each time a new shipment of coal/petroleum coke fuel is received or solid fuel is gasified.
[PSD-FL-194(E)]

To:

E.5. Recordkeeping. Written or electronic records verifying that the coal/petroleum coke blends input to the solid fuel gasification system have not exceeded the 60.0 percent ~~(1,395 tons per day)~~ maximum petroleum coke by weight ~~limit and the blended fuel sulfur content of 3.5 percent by weight limit~~ specified by Specific Condition E.1., shall be maintained and submitted to the Department's Southwest District Office with each annual report. These records shall be ~~generated each time a new shipment of coal/petroleum coke fuel is received or solid fuel is gasified.~~ for each batch of coal/petroleum coke blend to be gasified. (e.g., a batch usually consists of a barge shipment).
[PSD-FL-194(E)]

TITLE V AIR OPERATION PERMIT
FINAL PERMIT REVISION NO.: 1050233-012-AV
REQUESTED PERMIT CONDITION CHANGES

2.0 SO_2 AND NO_X EMISSIONS MONITORING STRATEGY

2.1 PROCESS DESCRIPTION

PPS Unit Number 1 is a dual fuel combined cycle combustion turbine, capable of firing the primary fuel (syngas) and the back-up fuel (distillate oil). This arrangement of primary and secondary fuels, including limits on total operation on the back-up fuel is provided in permit condition A.3.

2.2 BASIS FOR REQUEST

The CT is subject to the requirements of New Source Performance Standard (NSPS) Subpart GG, Standards of Performance for Stationary Gas Turbines. One applicable provision of this NSPS is that to assure compliance with the sulfur dioxide and nitrogen oxides standards, regular sampling of the back-up fuel oil is required. Because TEC is requesting permit changes to allow the use of a continuous emissions monitoring system (CEMs) for compliance demonstration when firing syngas, TEC is also requesting permit language revisions to allow for the use of the CEMs for demonstration of compliance with the NSPS Subpart GG sulfur dioxide and nitrogen oxides emission limits when firing back-up fuel oil. Because the BACT SO_2 limits for the CT when firing fuel oil are based on a fuel oil sulfur content that is considerably less than the NSPS Subpart GG limit (i.e., a BACT fuel oil sulfur limit of no more than 0.05 weight percent sulfur vs. the 0.8 weight percent limit of Subpart GG), compliance with the BACT SO_2 emission limits specified in Condition A.5 will also provide assurance of compliance with the NSPS Subpart GG fuel sulfur content limit. Similarly, the BACT NO_x emission limit of 15 and 42 parts per million, volume dry (ppmvd) @ 15% O_2 (for syngas and fuel oil, respectively) are considerably less than the NSPS Subpart GG limit of 164 ppmvd @ 15% O_2. Accordingly, compliance with the BACT NO_x emission limits specified in Condition A.5 will also provide assurance of compliance with the NSPS Subpart GG NO_x emission limit.

TEC submitted a request to FDEP on August 7, 2000 to change the frequency of sampling the oil tank from after each fuel delivery to once per day during firing of back-up fuel. This request was based on the potential frequency of fuel oil deliveries, and the expenses associated with performing a large number of analyses. This request is continued in this permit revision; however, the fuel sampling would serve as a back up compliance demonstration method with a CEMs based method serving as the primary.

2.3 SUGGESTED PERMIT LANGUAGE

TEC proposes the following language to effect the requested change.

From:

> **A.14.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
> (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. Nitrogen oxide continuous emissions monitors may be used to determine the fuel bound nitrogen content of fuel oil combusted in gas turbines subject to this requirement.
> (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).
> [40 CFR 60.334(b)(1) & (2); and, PSD-FL-194(G)]

To:

> **A.14.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall demonstrate compliance with the SO_2 and NO_x 30-day rolling average emission standards in lb/hr specified in Condition A.5 via CEMs data to satisfy

these monitoring requirements. See Conditions A.24, A.25, and A.51. In the event CEMs data are not available, ~~T~~the owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined from a monthly fuel oil composite sample prepared from daily fuel oil samples ~~on each occasion that fuel is transferred to the storage tank from any other source~~. Nitrogen oxide continuous emissions monitors and Sulfur dioxide continuous emissions monitors may be used to determine the fuel bound nitrogen and sulfur content of fuel oil combusted in gas turbines subject to this requirement.
(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).
[40 CFR 60.334(b)(1) & (2); and, PSD-FL-194(G)]

From:

A.24. The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or the latest edition, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. See specific conditions A.5., A.7. and A.8.
[40 CFR 60.335(d); and, PSD-FL-194]

To

A.24. CEMs data showing compliance with the 30-day rolling average SO_2 emission standards specified in Condition A.5. shall be used to demonstrate compliance with the gaseous fuel sulfur dioxide standard and the liquid fuel sulfur content standard of 0.05 percent, by weight. See Condition A.14. In addition to any other requirements associated with the operation and maintenance of these CEMs (e.g., Acid Rain requirements), operation of the CEMs shall be in accordance with the requirements listed in A.34. The annual calibration RATA associated with these CEMs may be used in lieu of the required annual EPA Reference Method 20, provided the requirements of Rule 62-297.310, F.A.C., are met (e.g., prior test notification and proper test result submittal). Fuel sampling and analysis may be used to demonstrate compliance with the sulfur dioxide standard (limits) in the event that the SO_2 continuous emissions monitor is not able to capture valid data. Alternatively, ~~T~~the owner or operator ~~shall~~ may determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or the latest edition, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17); or an alternative method approved by the Department. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the ~~approval~~notification of the Administrator. See specific conditions A.5~~, A.7.~~ and A.8.
[40 CFR 60.335(d); and, PSD-FL-194]

From:

A.25. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335 (a) and 40 CFR 60.335(d) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. See specific condition A.14.
[40 CFR 60.335(e)]

To:

A.25. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the data collected by the NO_x and SO_2 CEMs to meet the provisions for determining the fuel sulfur and nitrogen content of the fuel being burned. Alternatively, in the event that the CEMs are not able to capture valid data, the owner or operator ~~shall~~ may use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. See specific conditions **A.14** and A.24.

From:

A.34. A continuous emission monitoring system (CEMS) shall be installed, operated, and maintained in accordance with 40 CFR 60, Appendix F, and shall meet the performance specifications of 40 CFR 60, Appendix B, to monitor nitrogen oxides and a diluent gas (carbon dioxide or oxygen).
[PSD-FL-194(A)]

To:

A.34. A continuous emission monitoring system (CEMs) shall be installed, operated, and maintained in accordance with 40 CFR 60, Appendix F, and shall meet the performance specifications of 40 CFR 60, Appendix B, or 40 CFR Part 75 Subpart B and C to monitor nitrogen oxides (NO_x), sulfur dioxide (SO_2), and a diluent gas (carbon dioxide or oxygen) in a manner sufficient to demonstrate compliance with the CEMs emission standard of this permit. See specific condition **A.5.**

a. **Emission Averages.** Compliance with the 30-day rolling average for NO_x and SO_2 emissions shall be based on data collected by the required CEMs. For purposes of calculating rolling averages, the first operating day of a rolling average period for a unit shall be the first operating day that occurs on or after the specified compliance date for that unit. Once the unit has operated the necessary number of days to generate an initial 30-day average, consistent with the applicable limit, each additional day the unit operates, a new 30-day ("rolling") average is generated. Thus, after the first 30 operating days from the compliance date, the owner or operator must be in compliance with the NO_x and SO_2 emission limits based on a 30-day rolling average each subsequent operating day. If a unit operates continuously throughout the day, the operating day's average shall be the average of the 24 consecutive valid 1-hour emission averages. If a unit operates less than 24 hours during the day, the 30-day rolling average shall be the average of available valid 1-hour emission averages collected during operation for 30 unit operating days. If monitoring data is excluded (due to startup, shutdown, malfunction, or tuning), the 30-day rolling average shall be the average of the remaining available valid 1-hour emission averages collected during operation for 30 unit operating days.

b. **Data Collection.** The CEMs shall be designed and operated to sample, analyze, and record NO_x, SO_2, and diluent gas (carbon dioxide or oxygen) data evenly spaced over the hour. Each 1-hour emission average shall be computed using at least one data point in each fifteen minute quadrant of the 1-hour block during which the unit combusted fuel. Notwithstanding this requirement, each 1-hour emission average shall be computed from at least two data points separated by a minimum of 15 minutes. If the unit does not operate in more than one quadrant of a 1-hour block, the data is insufficient to determine a 1-hour emission average and shall be ignored. (Example: Unit begins startup with only ten minutes remaining in the 1- hour block. Data is insufficient to determine a 1-hour average and is ignored.) All valid measurements or data points collected during a 1-hour block shall be used to calculate the 1-hour emission averages. The NOx CEMs shall express the 1-hour emission averages and the 30-day rolling block averages in terms of "ppmvd corrected to 15% oxygen" and "lb/hr".

c. **Data Exclusion.** The CEMs at all times including episodes of startup, shutdown, malfunction, and tuning sha0ll record NO_x, SO_2, and CO_2 emissions data. NO_x, SO_2, and CO_2 emissions data recorded during such episodes may be excluded from the 30-day rolling compliance averages in accordance with the requirements of Condition A.38.(a) of this section. All periods of data excluded due to startup, shutdown or malfunction shall be consecutive for each episode. The permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during startup, shutdown and malfunction. Excess Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited. Excluded emissions shall be summarized in the required semiannual report.

d. **NO_x and SO_2 Certification.** The NO_x and SO_2 monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the CEMs emission standards of this permit, missing data shall not be substituted. Record keeping and reporting shall be conducted pursuant to Part 75, .The RATA tests required for the NO_x monitor shall be performed using EPA Method 7E or 20 as defined in Appendix A of 40 CFR 60.

e. **CO_2 Certification.** The CO_2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures for the monitor shall conform to the requirements of 40 CFR 60, Appendix F. The RATA tests required for the CO_2 monitor shall be performed using EPA Method 3A, of Appendix A in 40 CFR 60.

[PSD-FL-194(A), Rules 62-4.070(3), 62-297.520, 62-210.700(5), and 62-212.400 (BACT), F.A.C]

From:

A.51. Sulfur Content of Fuel. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent, by weight. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334 by testing for sulfur content of the fuel oil in the storage tanks once per day when firing oil. Testing for fuel oil heating value shall also be conducted on the same schedule. See specific condition A.8. [PSD-FL-194]

To:

A.51. Sulfur Content of Fuel. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent, by weight. A sulfur dioxide continuous emission monitoring system (SO_2 CEMs) shall be used to demonstrate compliance of sulfur content of fuel. Alternatively, c~~C~~ompliance may ~~shall~~ be demonstrated in accordance with the requirements of 40 CFR 60.334 by testing for sulfur content of the fuel oil from a monthly fuel oil composite sample prepared from daily fuel oil samples ~~in the storage tanks once per day when firing oil~~. Testing for fuel oil heating value shall also be conducted on the same schedule. Vendor fuel oil analyses may be used to satisfy these monitoring requirements. See specific condition **A.8.**

[PSD-FL-194]

TITLE V AIR OPERATION PERMIT
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REQUESTED PERMIT CONDITION CHANGES

3.0 WATER TO FUEL RATIO REPORTING

Reporting for excess emissions include a requirement to provide a report on any exceedance of the water-to-fuel ratio when firing fuel oil in Unit 1. This requirement is derived from NSPS Subpart GG (40 CFR 60.334(a)), which uses the water-to-fuel ratio as a surrogate parameter for demonstration of compliance with the NO_x emissions limit. The NO_x emissions from Unit 1 are measured continuously via CEMs to demonstrate compliance with a BACT emissions limit that is considerably more stringent than the NSPS emissions limit (i.e., 42 ppm versus 164 ppm). Based on U.S. EPA guidance for streamlining permit requirements for situations involving multiple regulatory requirements, TEC requests that the CEMs be used in lieu of the water-to-fuel ratio monitoring. Because compliance with the more stringent BACT NO_x emissions limit will assure compliance with the less stringent NSPS emissions limit, the compliance demonstration methodology for the BACT emissions limit can be used to satisfy the requirement for the NSPS monitoring. Additionally, the current Title V Air Operation Permit No. 1050233-012-AV for PPS Emissions Units 2 and 3 includes such a waiver as specified in Condition F.31 as follows:

> CEMs in lieu of Water to Fuel Ratio: The NOx CEMs shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (1998 version) will be replaced by the 40 CFR 75 certification tests of the NOx CEMs.

TEC suggests using this condition to state that the requirements of NSPS Subpart GG are met by the direct NO_x monitoring performed by the CEMs. It is suggested that Condition A.13 be removed in its entirety, and replaced with the language similar to that used in Condition F.31 of the permit for Units 2 and 3. Because the initial NO_x CEMs certification tests have been completed for Unit 1, the language contained in Condition F.31 for Units 2 and 3 related to the calibration of the water/fuel monitoring device is not required for Unit 1. TEC proposes the following language to effect the requested change.

From:

> **A.13.** The owner and operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NOx emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator.
>
> [40 CFR 60.334(a); and, PSD-FL-194(a)]

To:

> ~~**A.13.** The owner and operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NOx emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator.~~
> ~~[40 CFR 60.334(a); and, PSD-FL-194(a)]~~
> **A.13.** CEMs in lieu of Water to Fuel Ratio: The owner and operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using NOx CEMs for compliance may use NOx CEMs in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 version).

Additionally, the replacement of Condition A.13 requires a change to Condition A.1, which calls out Condition A.13 for the periodic monitoring requirements of heat input. The heat input is used primarily to demonstrate the operational capacity of the unit, and that the potential emissions rates as modeled to support the initial PSD construction permit application are valid. To satisfy the operational capacity of the unit, it is proposed to monitor the heat input rate as part of the annual stack tests that are required by Condition A.33. As for the assurance of potential emission rates, historical operational data for heat input rate during the past two years were analyzed to assure that the operational capacity of the CT was not exceeded. The data indicates complete compliance with the reported maximum heat input rate, hence

there is little benefit to continuing these measurements. Additionally, the use of CEMs for NO_x and SO_2 will help assure actual emission rates do not exceed the modeled potential emission rates. Hence, it is suggested that Condition A.1 be modified as follows:

From:

> **A.1.** Permitted Capacity. The maximum heat input rate (higher heating value) is 1,755 million Btu per hour when firing syngas and 1,765 million Btu per hour when firing No. 2 fuel oil at an ambient temperature of 59°F. Manufacturer's curves approved by the Department of the heat input correction to other temperatures may be utilized to establish heat input rates over a range of temperatures for compliance determination. Monitoring required under condition A.13 shall satisfy periodic monitoring requirements for heat input.

To:

> **A.1.** Permitted Capacity. The maximum heat input rate (higher heating value) is 1,755 million Btu per hour when firing syngas and 1,765 million Btu per hour when firing No. 2 fuel oil at an ambient temperature of 59°F. Manufacturer's curves approved by the Department of the heat input correction to other temperatures may be utilized to establish heat input rates over a range of temperatures for compliance determination. Monitoring required under condition ~~A.13~~ A.33 shall satisfy periodic monitoring requirements for heat input.

The inclusion of the monitoring of the heat input rate during the performance testing required by Condition A.33 is included in Section 4.2 which addresses the performance testing requirements.

Condition A.18 addresses recording fuel consumption and water to fuel ratio when determining compliance with the provisions of NSPS Subpart GG. Because a NO_x CEMs is the primary compliance strategy for these provisions, this condition is no longer needed. Therefore, TEC requests that Condition A.18 be removed in its entirety.

Condition A.40 addresses the basis for the determination of excess emissions for the purposes of burning fuel oil in the CT. This basis is the use of the water-to-fuel ratio. Because CEMs will monitor NOx emissions, it is suggested to revise this condition as follows:

From:

> **A.40.** For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
> a. Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
> [Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

To:

> **A.40.** For the purposes of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
> a. Nitrogen oxides. Any ~~one-hour~~ period during which the NO_x 30-day rolling average ~~water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio is greater than the ppm or lb/hr limit determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test.~~ as monitored by the CEMs during oil or syngas firing exceeds 311 lb/hr or 132 lb/hr, respectively. Each report shall include the NO_x 30-day rolling average emission rate as measured by the CEMs ~~water-to-fuel ratio, average fuel consumption, ambient conditions, and gas turbine load, and nitrogen content of the fuel~~ during the period of excess emissions~~, and the graphs or figures developed under 40 CFR 60.335(a).~~ and any other requirements in Condition A.41. through A.43.

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4.0 CLARIFICATION OF TESTING REQUIREMENTS

4.1 BASIS FOR REQUEST

TEC holds a number of Title V operating permits for our various operating facilities. Some of these permits (e.g., the Hookers Point and Big Bend permits) use a listing format to delineate these requirements, the frequency, and the appropriate test method. TEC requests that a similar table be provided in the PPS Title V permit to facilitate a clear understanding of these test requirements, and to allow for consistency of approach across the issued operating permits for several facilities.

4.2 SUGGESTED PERMIT LANGUAGE

Condition A.33 currently states the requirements of the performance testing for Unit Number 1 (E.U. ID No. 001). It is suggested that this condition be revised similar to a condition of the F.J. Gannon Station Permit[1], Condition A.3.

From:

A.33. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

[1] Title V Operating Permit for the F.J. Gannon Station, located at 3602 Port Sutton Rd. Tampa, FL 33619. Title V Air Operation Permit No. 0570040-017-AV effective date of January 1, 2001.

TITLE V AIR OPERATION PERMIT
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REQUESTED PERMIT CONDITION CHANGES

To:

A.33. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. Unit Number 1 shall be stack tested for visible emissions, carbon monoxide, sulfur dioxide, and nitrogen oxide emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30). The annual calibration RATA associated with the use of SO_2 and NO_x CEMs may be used in lieu of the required annual EPA Reference Method 6 for SO_2 and Method 20 for NO_x as long as all of the requirements of Rule 62-297.310, F.A.C., are met. During the annual testing, the heat input rate shall be monitored as required by condition A.1.

Unit No. 1 Required Testing

Fuel - Syngas:
- Nitrogen Oxides (NO_x) - Annually
- Sulfur Dioxide (SO_2) - Annually
- Volatile Organic Compounds (VOC) - Initial Only*
- Carbon Monoxide (CO) - Annually
- Particulate Matter (PM/PM_{10}) - Initial Only*
- Lead (Pb) - Initial Only (A.27)
- Visible Emissions (VE) - Annually
- Sulfuric Acid - Initial Only (A.27)
- Arsenic - Initial Only (A.27)
- Beryllium - Initial Only (A.27)
- Mercury - Initial Only (A.27)

Fuel - No.2 Oil:
- Nitrogen Oxides (NO_x) - Annually
- Sulfur Dioxide (SO_2) - Annually
- Volatile Organic Compounds (VOC) - Initial Only*
- Carbon Monoxide (CO) - Annually
- Particulate Matter (PM / PM_{10}) - Initial Only*
- Lead (Pb) - Initial Only (A.27)
- Visible Emissions (VE) - Annually
- Sulfur Dioxide (SO_2), % Sulfur - Monthly Composite

* Pollutants do not have a potential to emit 100 tons per year or more

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours in a federal fiscal year.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

Similarly, for the Auxiliary Boiler the following testing schedule shall be adhered to as required by Condition B.29:

From:

B.29. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

To:

B.29. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. The Auxiliary Boiler shall be stack tested for visible emissions and nitrogen oxide emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30). The annual calibration RATA associated with the use of NOx CEMs may be used in lieu of the required annual EPA Reference Method 7, 7A, 7C, 7D, or 7E for NO_x as long as all of the requirements of Rule 62-297.310, F.A.C., are met.

Auxiliary Boiler Required Testing
Nitrogen Oxides (NO_x) - Initial Only*
Sulfur Dioxide (SO_2), %Sulfur - Monthly Composite
Particulate Matter (PM) - Initial Only*
Visible Emissions (VE) – Annually

* Pollutants do not have a potential to emit 100 tons per year or more

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during

which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours in a federal fiscal year.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

For the Sulfuric Acid Plant, the following testing schedule shall be adhered to as required by Condition C.20:

From:

C.20. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a

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

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

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

C.20. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. The Sulfuric Acid Plant shall be stack tested for visible emissions and sulfur dioxide emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30).

Sulfuric Acid Plant Required Testing
Sulfur Dioxide (SO_2) – Annually
Sulfuric Acid Mist (H_2SO_4) - Initial Only. VE will be used as a surrogate.
Visible Emissions (VE) – Annually

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

For the Solid Fuel Handling System, the following testing schedule shall be adhered to as required by Condition D.5:

From:

D.5. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to

satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate;

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

To:

D.5. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. The Solid Fuel Handling System shall be tested for visible emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30).

Solid Fuel Handling System
Visible Emissions – Annually

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate;
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

TITLE V AIR OPERATION PERMIT
FINAL PERMIT REVISION NO.: 1050233-012-AV
REQUESTED PERMIT CONDITION CHANGES

For Unit Number 2 and 3 (E.U. ID No. 009 and 010), the following testing schedule shall be adhered to as required by Condition F.27:

From:

F.27. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

To:

F.27. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. Unit Number 2 and 3 shall be stack tested for visible emissions, carbon monoxide, sulfur dioxide, and nitrogen oxide emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30). The annual calibration RATA associated with the use of NO_x CEMs may be used in lieu of the required Method 20 for NO_x as long as all of the requirements of Rule 62-297, F.A.C., are met.

Unit No. 2 and 3 Required Testing

Fuel - Natural Gas:	Fuel – No.2 Oil:
Nitrogen Oxides (NO_x) – Annually	Nitrogen Oxides (NO_x) - Annually
Sulfur Dioxide (SO_2) – Annually	Sulfur Dioxide (SO_2) - Annually
Volatile Organic Compounds (VOC) - Initial Only (F.19)	Volatile Organic Compounds (VOC) - Initial Only (F.19)
Carbon Monoxide (CO) - Initial Only*	Carbon Monoxide (CO) - Initially Only*
Visible Emissions (VE) – Annually	Visible Emissions (VE) - Annually
Sulfur Dioxide (SO_2), gr/100 scf Sulfur - Annually	Sulfur Dioxide (SO_2), % Sulfur - Monthly Composite

* Pollutants do not have a potential to emit 100 tons per year or more

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours in a federal fiscal year.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

5.0 STARTUP, SHUTDOWN, MALFUNCTION, AND LOW LOAD OPERATION

5.1 BASIS FOR REQUEST

As mentioned above on Section 4.0, TEC holds a number of Title V operating permits and Construction permits for our various operating facilities. Some of these permits (e.g., the Bayside) better clarify the CEMs data exclusion for the facility related to startup, shutdown, malfunction, and low load operation. TEC requests that a similar condition be included in the PPS Title V permit to facilitate a clear understanding of the exclusion of monitoring data, and to allow for consistency of approach across the issued operating permits for several facilities.

5.2 SUGGESTED PERMIT LANGUAGE

In addition to what Condition A.38 currently states, it is suggested that this condition be revised similar to a condition of the Bayside Power Station Construction Permit[2], Condition 17.

[2] PSD Construction Air Permit for Bayside Power Station, located at 3602 Port Sutton Rd. Tampa, FL 33619. Construction Air Permit No. PSD-FL-301(A) and Project No. 0570040-015-AC effective date of January 9, 2002.

TITLE V AIR OPERATION PERMIT
FINAL PERMIT REVISION NO.: 1050233-012-AV
REQUESTED PERMIT CONDITION CHANGES

From:

A.38. All continuous monitoring systems or monitoring devices shall be installed such that representative measurement of emissions or process parameters from the affected facility are obtained.

To:

A.38. All continuous monitoring systems or monitoring devices shall be installed such that representative measurement of emissions or process parameters from the affected facility are obtained.

A.38(a). Alternate Standards and CEMs Data Exclusion: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and malfunction of a gas turbine. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.

a. **CEMs Data Exclusion**: For the following identified operational periods, NO_x and SO_2 emissions data may be excluded from the 30-day rolling compliance averages in accordance with the corresponding requirements.
   (1) *Startup, Shutdown, and Malfunction*: Periods of gas turbine startup, shutdown, or malfunction data may be excluded from the 30-day rolling compliance average due to all such episodes. Gas turbine startup is the commencement of operation of a gas turbine that has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, or pollution control device imbalances, which may result in elevated emissions. Shutdown is the process of bringing a gas turbine off line and ending fuel combustion. A malfunction is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

If a CEMs reports emissions in excess of a NO_x and SO_2 30-day rolling average standard, the permittee shall notify the Compliance Authority within one working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Compliance Authority may request a written summary report of the incident.

In addition to what Condition F.30 currently states, it is suggested that this condition be revised similar to a condition of the Bayside Power Station Construction Permit, Condition 17.

From:

F.30. CEMs for reporting excess emissions: Excess Emissions and Monitoring System Performance Reports shall be submitted as specified in 40 CFR 60.7(c). CEM monitor downtime shall be calculated and reported according to the requirements of 40 CFR 60.7(c)(3) and 40 CFR 60.7(d)(2). See specific Conditions F.36. and F.37. Periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in specific Condition F.4., shall be reported to the DEP Southwest District within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day).

To:

F.30. CEMs for reporting excess emissions: Excess Emissions and Monitoring System Performance Reports shall be submitted as specified in 40 CFR 60.7(c). CEM monitor downtime shall be calculated and reported according to the requirements of 40 CFR 60.7(c)(3) and 40 CFR 60.7(d)(2). See specific Conditions F.36. and F.37. Excluding periods specified on Condition F.30(a), Pperiods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in specific Condition F.4., shall be reported to the DEP Southwest District within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day).

F.30(a). Alternate Standards and CEMs Data Exclusion: The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and malfunction of a gas turbine. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.

a. **Load Operation:** Excluding startup, shutdown, and malfunction, the turbine is allowed up to two hours of operation below 50% base load per unit cycle (breaker closed to breaker open).
b. **CEMs Data Exclusion**: For the following identified operational periods, NO_x emissions data may be excluded from the 24-hr block average and/or 3-hr block average in accordance with the corresponding requirements.
   (1) *Startup, Shutdown, and Malfunction*: Periods of gas turbine startup, shutdown, or malfunction data may be excluded from the 24-hr block average and/or 3-hr block compliance average due to all such episodes. Gas turbine startup is the commencement of operation of a gas turbine that has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, or pollution control device imbalances, which may result in elevated emissions. Shutdown is the process of bringing a gas turbine off line and ending fuel combustion. A malfunction is any unavoidable mechanical and/or

electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

If a CEMs reports emissions in excess of a NO_x standard, excluding periods specified on Condition F.30(a), the permittee shall notify the Compliance Authority within one working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Compliance Authority may request a written summary report of the incident.

6.0 ASSORTED PERMIT HYGIENE

In reviewing the Title V permit, TEC has identified several opportunities to perform minor changes to allow for the permit to accurately reflect the operations at the facility. These minor changes are suggested in this section.

6.1 CONDITION D.1 – FUEL HANDLING

Condition D.1 requires TEC to take reasonable precautions to prevent particulate matter (PM) emissions. One requirement is to enclose a variety of operations such as fuel storage and transfer operations. TEC takes reasonable precautions to prevent PM emissions from these operations; however, some operations are better characterized as covered as opposed to enclosed. Thus, TEC requests the following revision to the brief description section of the Solid Fuel Handling System (E.U. ID No. 005) and this permit condition to allow the permit to reflect the operations at the facility.

From:

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

E.U. ID No.	Brief Description
-005	Solid Fuel Handling System

The solid fuel handling system consists of a bottom unloading station where water/surfactant spray is applied to the incoming fuel as needed for dust control. The system also includes enclosed conveying systems, rubber skirted drop points from bins, two fuel silos with an associated bag house, a fuel surge bin with an associated bag house, and two rod mill crushers for slurry production.

Solid fuel is received by truck and is bottom unloaded to the fuel unloading bin. Fugitive emissions are controlled by water spray with surfactant applied at the unloading bin as needed. Fuel is conveyed via enclosed conveyor from the unloading bin to the fuel storage silos. The transfer points from the bin to the belts are rubber skirted. Fugitive emissions from the fuel silos are controlled by an associated bag house. Fuel is then reclaimed from the silos via enclosed conveyors to the surge bin inside the slurry preparation building. Fugitive emissions from the surge bin are controlled by an associated bag house. Fuel and water are then mixed in the rod mill crushers to produce a coal slurry.

To:

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

E.U. ID No.	Brief Description
-005	Solid Fuel Handling System

The solid fuel handling system consists of a bottom unloading station where water/surfactant spray is applied to the incoming fuel as needed for dust control. The system also includes enclosed or covered conveying systems, rubber skirted drop points from bins, two fuel silos with an associated bag house, a fuel surge bin with an associated bag house, and two rod mill crushers for slurry production.

Solid fuel is received by truck and is bottom unloaded to the fuel unloading bin. Fugitive emissions are controlled by water spray with surfactant applied at the unloading bin as needed. Fuel is conveyed or covered via enclosed conveyor from the unloading bin to the fuel storage silos. The transfer points from the bin to the belts are rubber skirted. Fugitive emissions from the fuel silos are controlled by an associated bag house. Fuel is then reclaimed from the silos via enclosed or covered conveyors to the surge bin inside the slurry preparation

building. Fugitive emissions from the surge bin are controlled by an associated bag house. Fuel and water are then mixed in the rod mill crushers to produce a coal slurry.

From:

D.1. Methods of Operation. Particulate matter emissions from the handling of solid fuels shall be controlled by enclosing all solid fuel storage, conveyors and conveyor transfer points.

To:

D.1. Methods of Operation. Particulate matter emissions from the handling of solid fuels shall be controlled by enclosing or covering all solid fuel storage, conveyors and conveyor transfer points.

6.2 CONDITION A.5 – EMISSION LIMITATIONS

Condition A.5 lists emissions limits for a variety of pollutants, and includes a footnote on the limit that the emission limitations in lb/hr are 30-day rolling averages. For those pollutants (e.g., SO_2 and NO_x) that are measured using continuous emissions monitoring systems (CEMs), this footnote is appropriate. However, other pollutants (e.g., CO) will be measured by stack test using an appropriate reference test method (RTM). Typically, an RTM requires three test runs of one hour minimum each.

TEC believes it is appropriate to make the distinction that although the emissions limit is expressed on a 30-day rolling average, compliance demonstration may be performed using a shorter time period. Because a shorter averaging time is more restrictive than a longer averaging time, compliance demonstration using a RTM should be allowed since these limits that are expressed as 30-day rolling averages. To make this distinction, TEC suggests the following revision to the footnote.

(*) Emission limitations in lb/hr are 30-day rolling averages. Compliance with the 30-day rolling averages may be demonstrated using a shorter period reference test method (e.g., based on three one-hour runs).

Additionally, this condition states that these emissions limits apply in the post demonstration period. Because the demonstration period is completed, these are the appropriate limits. TEC suggests removal of the words "for the post demonstration period" to avoid any confusion, as follows:

A.5. The maximum allowable emissions ~~for the post demonstration period~~ shall not exceed the following:

This condition also requires TEC to submit fuel bound nitrogen for the low sulfur back-up fuel to the FDEP. Because the primary monitoring strategy for fuel bound nitrogen content was changed to CEMs in a prior permit revision, it is appropriate to remove this provision. The following permit language is recommended to incorporate the revisions mentioned in this section. .

From:

A.5. The maximum allowable emissions for the post demonstration period shall not exceed the following:

POLLUTANT	FUEL	BASIS [a]	LB / HR [c]	TPY [b]
NO_x	Oil	42 ppmvd **	311	N/A
	Syngas	25 ppmvd	220.25	1,032.9
VOC [c]	Oil	0.028 lb/MMBtu	32	N/A
	Syngas	0.0017 lb/MMBtu	3	38.5
CO	Oil	40 ppmvd	99	N/A
	Syngas	25 ppmvd	98	430.1
PM / PM10 d	Oil	0.009 lb/MMBtu	17	N/A
	Syngas	0.013 lb/MMBtu	17	74.5
Pb	Oil	5.30E-5 lb/MMBtu	0.101	N/A
	Syngas	2.41E-6 lb/MMBtu	0.0035	0.067

SO_2	Oil	0.048 lb/MMBtu	92.2	N/A
	Syngas	0.17 lb/MMBtu	357	1,563.7
Sulfuric Acid [e]	Syngas		55	241
Inorganic Arsenic	Syngas		0.0006	0.019
Beryllium Syngas	Syngas		0.0001	0.0029
Mercury Syngas	Syngas		0.0034	0.017

(*) Emission limitations in lb/hr are 30 day rolling averages.
(**) The emission limit for NO_X is adjusted as follows for higher fuel bound nitrogen contents up to a maximum of 0.030 percent, by weight:

FUEL BOUND NITROGEN (% by weight)	NO_X EMISSION LEVELS (ppmvd @ 15% O_2)
0.015 or less	42
0.020	44
0.025	46
0.030	48

Using the formula: STD = 0.0042 + F
where:
STD = allowable NO_X emissions (% by volume at 15% O_2 and on a dry basis)
F = NO_X emission allowance for fuel bound nitrogen (FBN) defined by the following table:

FUEL BOUND NITROGEN (% by weight)	F (NO_X % by volume)
0 < N < 0.015	0
0.015 < N < 0.03	0.04 (N - 0.015)

where:
N = nitrogen content of the fuel (% by weight)

The permittee shall submit fuel bound nitrogen content data for the low sulfur fuel oil to the Southwest District office in Tampa on each occasion that fuel oil is transferred to the storage tanks from any other source. The percent FBN (Z) following each delivery of fuel shall be determined by the following equation:

x (Y) + m (n) = (x+m) (Z)
where:
x = amount of fuel in the storage tank
Y = % FBN in the storage tank
m = amount of fuel added
n = % FBN of the fuel added
Z = % FBN of composite fuel

(a) Syngas lb/MMBtu values are based on heat input (HHV) to the solid fuel gasifier and includes emissions from the sulfuric acid plant thermal oxidizer. Pollutant concentrations in ppmvd are corrected to 15 percent oxygen.
(b) Annual emission limits (TPY) are based on 10 percent annual capacity factor firing fuel oil.
(c) Exclusive of background concentrations.
(d) Excluding sulfuric acid mist.
(e) Sulfuric acid mist emissions assume a maximum of 0.05 percent sulfur, by weight, in the fuel oil.
[PSD-FL-194(E)]

To:

A.5. The maximum allowable emissions ~~for the post demonstration period~~ shall not exceed the following:

POLLUTANT	FUEL	BASIS [a]	LB / HR [c]	TPY [b]
NO_X	Oil	42 ppmvd **	311	N/A
	Syngas	25 ppmvd	220.25	1,032.9
VOC [c]	Oil	0.028 lb/MMBtu	32	N/A
	Syngas	0.0017 lb/MMBtu	3	38.5
CO	Oil	40 ppmvd	99	N/A
	Syngas	25 ppmvd	98	430.1
PM / PM10 d	Oil	0.009 lb/MMBtu	17	N/A
	Syngas	0.013 lb/MMBtu	17	74.5
Pb	Oil	5.30E-5 lb/MMBtu	0.101	N/A
	Syngas	2.41E-6 lb/MMBtu	0.0035	0.067

SO_2	Oil	0.048 lb/MMBtu	92.2	N/A
	Syngas	0.17 lb/MMBtu	357	1,563.7
Sulfuric Acid [e]	Syngas		55	241
Inorganic Arsenic	Syngas		0.0006	0.019
Beryllium Syngas	Syngas		0.0001	0.0029
Mercury Syngas	Syngas		0.0034	0.017

(*) Emission limitations in lb/hr are 30 day rolling averages. Compliance with the 30-day rolling averages may be demonstrated using a shorter period reference test method (e.g., based on three one-hour runs).

(**) The emission limit for NO_X is adjusted as follows for higher fuel bound nitrogen contents up to a maximum of 0.030 percent, by weight:

FUEL BOUND NITROGEN (% by weight)	NO_X EMISSION LEVELS (ppmvd @ 15% O_2)
0.015 or less	42
0.020	44
0.025	46
0.030	48

Using the formula: STD = 0.0042 + F
where:
STD = allowable NO_X emissions (% by volume at 15% O_2 and on a dry basis)
F = NO_X emission allowance for fuel bound nitrogen (FBN) defined by the following table:

FUEL BOUND NITROGEN (% by weight)	F (NO_X % by volume)
0 < N < 0.015	0
0.015 < N < 0.03	0.04 (N - 0.015)

where:
N = nitrogen content of the fuel (% by weight)

~~The permittee shall submit fuel bound nitrogen content data for the low sulfur fuel oil to the Southwest District office in Tampa on each occasion that fuel oil is transferred to the storage tanks from any other source. The percent FBN (Z) following each delivery of fuel shall be determined by the following equation:~~

~~x (Y) + m (n) = (x+m) (Z)~~
~~where:~~
~~x = amount of fuel in the storage tank~~
~~Y = % FBN in the storage tank~~
~~m = amount of fuel added~~
~~n = % FBN of the fuel added~~
~~Z = % FBN of composite fuel~~

(a) Syngas lb/MMBtu values are based on heat input (HHV) to the solid fuel gasifier and includes emissions from the sulfuric acid plant thermal oxidizer. Pollutant concentrations in ppmvd are corrected to 15 percent oxygen.
(b) Annual emission limits (TPY) are based on 10 percent annual capacity factor firing fuel oil.
(c) Exclusive of background concentrations.
(d) Excluding sulfuric acid mist.
(e) Sulfuric acid mist emissions assume a maximum of 0.05 percent sulfur, by weight, in the fuel oil.
[PSD-FL-194(E)]

6.3 CONDITIONS A.7, A.49, AND A.50 – DEMONSTRATION PERIOD EMISSION LIMITS

Condition A.7 lists the emission limits that applied during the demonstration period, which is completed. Because these emission limits no longer apply, TEC suggests removing this condition in its entirety.

Condition A.49 provides emissions testing required during the demonstration period, and the submittal of performance test results. Because these requirements are satisfied and the demonstration period is completed, TEC suggests removing this condition in its entirety.

Condition A.50 requires the submittal of a NO_x recommended BACT determination after the conclusion of the demonstration period. Because this submittal was submitted and the demonstration period is completed, TEC suggests removing this condition in its entirety.

6.4 EXCESS EMISSIONS WORDING

Condition A.10 addresses excess emissions and reporting of such. Condition A.11 contains a prohibition of excess emissions that may be reasonably prevented through actions such as proper maintenance and operation.

When compared to Conditions F.9, F.10, and F.38 for the PPS Unit Numbers 2 and 3, similarities and differences are noted. Unit Number 1 Condition A.11 and Unit Numbers 2 and 3 Condition F.10 are sufficiently similar that no changes are requested. However, Unit Number 1 Condition A.10 and A.44 and Unit Numbers 2 and 3 Conditions F.9 and F.38 are sufficiently different that TEC requests revision of the Unit Number 1 permit condition to be consistent with the provisions of the conditions for Unit Numbers 2 and 3. By having one consistent set of excess emissions requirements, TEC will be better able to meet these requirements at the PPS. It is suggested that Condition A.10 and A.44 be deleted and replace with the following text.

From:

> **A.10.** Excess emissions from this emissions unit resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. Best operational practices shall be documented in writing and submitted to the Department. The documentation shall include limitations on excess emissions caused by turbine startup and shall be updated within thirty (30) days of implementation of any changes.
> [Rule 62-210.700(1), F.A.C.; and, PSD-FL-194]

To:

> ~~**A.10.** Excess emissions from this emissions unit resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. Best operational practices shall be documented in writing and submitted to the Department. The documentation shall include limitations on excess emissions caused by turbine startup and shall be updated within thirty (30) days of implementation of any changes.~~
> ~~[Rule 62-210.700(1), F.A.C.; and, PSD-FL-194]~~
> **A.10.** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration.

From:

> **A.44.** Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
> [Rule 62-210.700(6), F.A.C.]

To:

> ~~**A.44.** Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.~~
> ~~[Rule 62-210.700(6), F.A.C.]~~
> **A.44.** Excess emissions report: If excess emissions occur due to a malfunction, the owner or operator shall notify DEP's Southwest District within (1) working day of identification of the excess emissions: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.

Similarly, Condition B.45 for the Auxiliary Boiler requires reporting of excess emissions from malfunctions. TEC suggests similar changes for consistency, namely to delete Condition B.45 and replace it with the same text used for Condition A.44, with the appropriate citation changed for the referenced emissions limits.

6.5 SOLID FUEL HANDLING SYSTEM DESCRIPTION

The description for solid fuel handling is contained in Subsection D, E.U. ID No. 005. An administrative amendment was processed by FDEP on May 14, 2002 to remove the word "bottom" from the description of the type of unloading to allow for flexibility in TEC's operations. It is suggested that the wording contained in this permit be revised in accordance with this amendment for consistency, as follows:

From:

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

E.U. ID No.	Brief Description
-005	Solid Fuel Handling System

The solid fuel handling system consists of a bottom unloading station where water/surfactant spray is applied to the incoming fuel as needed for dust control. The system also includes enclosed conveying systems, rubber skirted drop points from bins, two fuel silos with an associated bag house, a fuel surge bin with an associated bag house, and two rod mill crushers for slurry production.

Solid fuel is received by truck and is bottom unloaded to the fuel unloading bin. Fugitive emissions are controlled by water spray with surfactant applied at the unloading bin as needed. Fuel is conveyed via enclosed conveyor from the unloading bin to the fuel storage silos. The transfer points from the bin to the belts are rubber skirted. Fugitive emissions from the fuel silos are controlled by an associated bag house. Fuel is then reclaimed from the silos via enclosed conveyors to the surge bin inside the slurry preparation building. Fugitive emissions from the surge bin are controlled by an associated bag house. Fuel and water are then mixed in the rod mill crushers to produce a coal slurry.

To:

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

E.U. ID No.	Brief Description
-005	Solid Fuel Handling System

The solid fuel handling system consists of a bottom unloading station where water/surfactant spray is applied to the incoming fuel as needed for dust control. The system also includes enclosed conveying systems, rubber skirted drop points from bins, two fuel silos with an associated bag house, a fuel surge bin with an associated bag house, and two rod mill crushers for slurry production.

Solid fuel is received by truck and is ~~bottom~~ unloaded to the fuel unloading bin. Fugitive emissions are controlled by water spray with surfactant applied at the unloading bin as needed. Fuel is conveyed via enclosed conveyor from the unloading bin to the fuel storage silos. The transfer points from the bin to the belts are rubber skirted. Fugitive emissions from the fuel silos are controlled by an associated bag house. Fuel is then reclaimed from the silos via enclosed conveyors to the surge bin inside the slurry preparation building. Fugitive emissions from the surge bin are controlled by an associated bag house. Fuel and water are then mixed in the rod mill crushers to produce a coal slurry.

6.6 UNIT 2 & 3 SIMPLE CYCLE COMBUSTION TURBINES

On October 4, 2002, TEC submitted a Title V Permit Revision Application requesting to modify the Title V Final Permit No. 1050233-009-AV. The modification allowed TEC to continue operating the two nominal 165 megawatt General Electric PG7241FA simple cycle, intermittent duty natural gas and No.2 fuel oil-fired combustion turbine-electric generators at Polk Power Station governed by Final

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REQUESTED PERMIT CONDITION CHANGES

Construction Permit No. PSD-FL-263. On March 14, 2003, comments on the DRAFT Title V Air Permit No. 1050233-012-AV were submitted to the agency on minor changes suggested by TEC. Some of these changes were applied on the FINAL Title V Air Permit No. 1050233-012-AV, but TEC would like to take the opportunity to revise these conditions for consistency with this letter and clarification along with some additional comments.

Condition F.6 should look similar to Condition 23 of TEC's PSD Permit number PSD-FL-263. Modification of Conditions F.6 is requested as follows:

From:

F.6. Visible Emissions. VE emissions shall not exceed 10 opacity.

[PSD-FL-263]

To:

F.6. Visible Emissions. VE emissions shall serve as a surrogate for PM/PM10 emissions and shall not exceed 10 percent opacity.

[PSD-FL-263]

As previously stated, TEC has used CEMs as the primary method of compliance for nitrogen oxides (NO_x) since the initial startup of Polk Unit 2 and 3, instead of monitoring fuel consumption and the ratio of water to fuel being fired in the turbine. To maintain consistency with Specific Condition F.31 and Condition 41 of Permit No. PSD-FL-263, Condition F.12 and F.16 should be removed in their entirety, since they were not on the original Construction Permit No. PSD-FL-263. TEC intends to demonstrate compliance will all applicable NO_x limits primarily through the use of CEMs data.

As proposed on Section 2.0 and above to allow the use of CEMs for compliance demonstration with the nitrogen content of the fuel being fired in the turbine, TEC suggests similar changes for consistency to Condition F.13 and F.34 as follows:

From:

F.13. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b). See specific Condition F.31., for only nitrogen.
[40 CFR 60.334(b)(1) & (2)]

To:

F.13. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall demonstrate compliance with the NO_x 24-hr block average and/or 3-hr block average emission standards in lb/hr specified in Condition F.4 via CEMs data to satisfy these monitoring requirements. In the event CEMs data are not available, ~~T~~the owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined ~~on each occasion that fuel is transferred to the storage tank from any other source~~ from a monthly fuel oil composite sample prepared from daily fuel oil samples. Nitrogen oxide CEMs may be used to determine the fuel bound nitrogen content of fuel oil combusted in gas turbines subject to this requirement as well as vendor

fuel oil analyses may be used to satisfy the sulfur content monitoring requirements. See specific Condition F.31. for nitrogen and F.34 for sulfur.

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b). ~~See specific Condition F.31., for only nitrogen.~~

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

From:

F.34. Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d). See specific Condition F.31., for only nitrogen.
[PSD-FL-263]

To:

F.34. Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and/or nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d). Alternatively, the permitee may use the monthly composite analysis to meet the provisions for determining the fuel sulfur content and the data collected by the NO_x CEMs to meet the provisions for determining the fuel nitrogen content. See specific Conditions F.13 and F.31., for only nitrogen.

[PSD-FL-263]

From:

F.35. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
a. Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a). See specific Condition F.31.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

To:

F.35. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
a. *Nitrogen oxides.* Any ~~one-hour~~ period during which the NO_x 24-hr block average and/or 3-hr block average ~~water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test.~~ as monitored by the CEMs during oil or natural gas firing exceeds 42 ppmvd (319 lb/hr) or 10.5 ppmvd (59 lb/hr), respectively. Each report shall include the NOx 24-hr block average and/or 3-hr block average emission rate as measured by the CEMs ~~water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel~~ during the period of excess emissions~~, and the graphs or figures developed under 40 CFR 60.335(a).~~ and any other requirement in Condition F.36 through F.38. See specific Condition F.31.

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

6.7 SULFURIC ACID PLANT

Specific Condition C.14 should reflect the minimum sample volume to be 30 dry standard cubic feet not 40 dry standard cubic feet, since the Sulfuric Acid Plant is not subject to Subpart H regulations and Martin Costello from the FDEP approved sampling at a lower volume. TEC suggests the following:

TITLE V AIR OPERATION PERMIT
FINAL PERMIT REVISION NO.: 1050233-012-AV
REQUESTED PERMIT CONDITION CHANGES

From:

C.14. Acid Mist/Sulfur Dioxide. The test method for acid mist shall be EPA Method 8, incorporated and adopted by reference in Chapter 62-297, F.A.C., or an alternative method approved by the Department. The minimum sample volume for the EPA Method 8 test shall be 40 dry standard cubic feet. The test method for sulfur dioxide shall be EPA Method 6C, incorporated and adopted by reference in Chapter 62-297, F.A.C., or an alternative method approved by the Department.
[Rule 62-296.402(3)(b), F.A.C.; and, applicant request received November 25, 2002]

To:

C.14. Acid Mist/Sulfur Dioxide. The test method for acid mist shall be EPA Method 8, incorporated and adopted by reference in Chapter 62-297, F.A.C., or an alternative method approved by the Department. The minimum sample volume for the EPA Method 8 test shall be ~~40~~30 dry standard cubic feet. The test method for sulfur dioxide shall be EPA Method 6C, incorporated and adopted by reference in Chapter 62-297, F.A.C., or an alternative method approved by the Department.
[Rule 62-296.402(3)(b), F.A.C.; and, applicant request received November 25, 2002]

ATTACHMENT A-15—
PRIOR GENERIC EXEMPTIONS

TAMPA ELECTRIC

June 25, 2001

Mr. Scott M. Sheplak, P.E.
Administrator, Title V Section
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via FedEx
Airbill No. 7900 8642 6427

Re: Tampa Electric Polk Power Station
Coal Residual Beneficiation

Dear Mr. Sheplak:

Tampa Electric Company (TEC) presently generates coal residual material, or slag, at its Polk Power Station as a by-product of the coal gasification process. An air source construction permit application to handle, store, beneficiate, and combust this by-product material at TEC's Big Bend Station was previously submitted to the Department and the Hillsborough County Environmental Protection Commission in May 2001. TEC now plans to install and operate the coal residual beneficiation process (i.e., the Charah Environmental Slag Beneficiation Process) at the Polk Power Station instead of the Big Bend Station. Coal residual beneficiated at the Polk Power Station will transferred by truck to the Big Bend Station for use as a supplemental fuel.

The coal residual beneficiation process is essentially a wet process and therefore will have insignificant fugitive particulate matter (PM) emissions. A process description, process flow diagram, and PM emission estimates are included with this letter as Attachments I through III, respectively. A professional engineer certification is provided in Attachment IV.

Estimates of potential fugitive PM emissions are projected to be less than one ton per year. Accordingly, the coal residual beneficiation process qualifies for the generic emissions unit exemption pursuant to Rule 62-210.300(3)(b)1., F.A.C. Department confirmation that the proposed Polk Power Station coal residual beneficiation process is exempt from permitting is requested. If you have any questions regarding this matter, please feel free to contact me at (813) 641-5376.

Sincerely,

Laura R. Crouch

Laura R. Crouch
Manager-Air Programs
Environmental Affairs

EA\l\SKT262

Enclosures

c: Mr. Jerry Kissel, FDEP SW

bc: H.W. Smith
W.T. Whale
G.M. Nelson
K.O. Zwolak
M.J. Hornick
L.N. Curtin, H&K
~~PR 4.5 (encl)~~ AP1.2
C2.1

TAMPA ELECTRIC COMPANY
P.O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

CUSTOMER SERVICE:

ATTACHMENT I

TAMPA ELECTRIC COMPANY
POLK POWER STATION

COAL RESIDUAL BENEFICIATION
PROCESS DESCRIPTION

Coal residual material, or slag, is a by-product of the Polk Power Station (PPS) coal gasification process. Tampa Electric Company (TEC) plans to install the Charah Environmental slag beneficiation process at the PPS to process this by-product coal residual and produce a material suitable for use as a supplemental fuel at TEC's Big Bend Station. The Charah beneficiation process is essentially a wet process and therefore will have insignificant emissions of particulate matter. A process flow diagram of the Charah beneficiation process is provided as Attachment II. A description of the Charah beneficiation process follows this introduction.

Slag currently stockpiled at the PPS will be transported to the inlet feed hopper of the beneficiation process by a rubber tired front-end loader. The slag is then transferred from the feed hopper to the slurry blunger by means of a conveyor belt. Water is added and the slag crushed in the blunger to produce a slag slurry that is subsequently pumped to a three deck primary screen.

Spray water is added at the primary screen to wash fines from the +0.5 inch oversize material. The +0.5 inch oversized material will be recycled to the blunger for recrushing. The primary screen will produce a washed 20 mesh to 0.5 inch material that will be transported of-site by truck and sold as an aggregate product. Material passing through the bottom of the primary screen will be pumped to a high frequency dewatering screen.

Underflow from the high frequency dewatering screen will be pumped to cyclones for additional water separation. Underflow from the cyclones will combine with the oversize material from the high frequency dewatering screen to feed a centrifuge for final dewatering. The centrifuge produces a moist, beneficiated coal residual that will be transported from the PPS by truck for use at the Big Bend Station as a supplemental fuel.

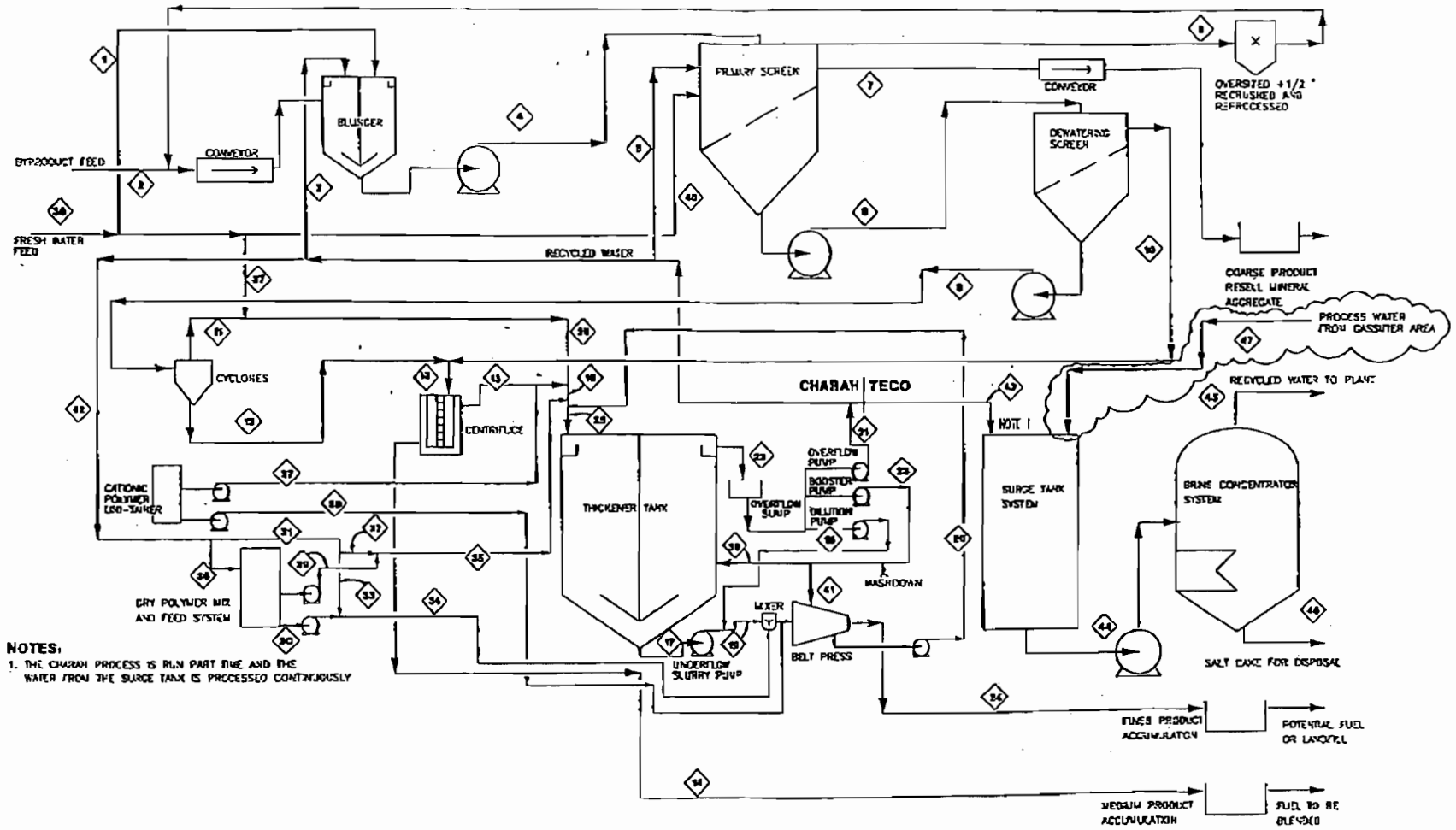
The overheads of the cyclones will combine with the centrifuge underflow and be pumped to a thickener. Cationic and anionic polymers will be added to the thickener to improves solids concentration. Underflow (i.e., concentrated solids) from the thickener will be pumped to a filter press for dewatering. Overflow water from the thickener will be recycled and used as process water.

Dewatered cake from the filter press will be initially trucked to a landfill for disposal. In the future, this material may also be blended with the beneficiated coal residual. The underflow from the filter press will be recycled to the feed section of the thickener.

ATTACHMENT II

TAMPA ELECTRIC COMPANY
POLK POWER STATION

COAL RESIDUAL BENEFICIATION
PROCESS FLOW DIAGRAM



NOTES:

1. THE CHARAH PROCESS IS RUN PART TIME AND THE WATER FROM THE SURGE TANK IS PROCESSED CONTINUOUSLY

CHARAH PROCESS AT POLK P.S.

TECO TAMPA ELECTRIC

PROCESS FLOW DIAGRAM CHARAH FUEL RECOVERY BENEFICIATION PROCESS POLK POWER STATION

92127-PFD-23-7F

ATTACHMENT III

TAMPA ELECTRIC COMPANY
POLK POWER STATION

COAL RESIDUAL BENEFICIATION
EMISSION ESTIMATES

As previously noted in Attachment I (Process Description), the Charah beneficiation process is essentially a wet process and therefore will have insignificant emissions of particulate matter (PM).

Potential fugitive PM emission points include:

- Transfer of slag from the existing slag stockpile to the beneficiation process inlet feed hopper by front-end loader;
- Transfer of slag from the inlet feed hopper to the slurry blunger; and
- Truck traffic on plant roadways.

The slag inlet feed rate will be up to 100 tons per hour, on a dry basis. Up to 200 tons per day of beneficiated coal residual will be produced by the Charah Environmental process.

Estimates of potential fugitive PM/PM_{10} emissions due to slag handling (upstream of the slurry blunger) are projected to be less than one ton per year using EPA AP-42 algorithms. Details of the potential fugitive PM/PM_{10} emission estimates are provided on the attached worksheets.

Downstream of the slurry blunger, fugitive PM/PM_{10} emissions will be minimal since the coal residual will be in a slurry form or as a moist, solid material. Fugitive PM/PM_{10} emissions due to truck traffic will be insignificant since all PPS roadways are paved and the trucks will be hauling a moist material.

EMISSION INVENTORY WORKSHEET

FUG-PM

Tampa Electric Company - Polk Power Station

EMISSION SOURCE TYPE

FUGITIVE PM - MATERIAL TRANSFER (DROPS) — Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description:	Fugitive PM - Polk Power Station Coal Residual (Drops)
Emission Control Method(s)/ID No.(s):	*Moist material, enclosures*
Emission Point ID:	FUG-PM

EMISSION ESTIMATION EQUATIONS

PM Emission (lb/hr) = 0.74 x 0.0032 x [(Wind Speed/5)$^{1.3}$ / (Material Moisture Content/2)$^{1.4}$] x Material Handled (ton/hr)

PM Emission (ton/yr) = 0.74 x 0.0032 x [(Wind Speed/5)$^{1.3}$ / (Material Moisture Content/2)$^{1.4}$] x Material Handled (ton/yr) x (1 ton/2,000 lb)

Source: Section 13.2-4, AP-42, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed: 8.6 mph

Material Moisture Content: 1.0 weight %

Material Transfer Point	Source ID	Material Transfer Rates (lb/hr)	Material Transfer Rates (tpy)	Uncontrolled Emission Factor (lb PM/ton)	Control Efficiency (%)	Controlled Emission Factor (lb PM/ton)	Potential PM Emission Rates (lb)	Potential PM Emission Rates (tons)
Front-End Loader to Inlet Feed Hopper	SF-1	200,000	73,000	0.012648	0.0	0.012648	1.26477	0.46164
Belt Conveyor to Slurry Blunger	SF-2	200,000	73,000	0.012648	0.0	0.012648	1.26477	0.46164
						Totals	**2.5295**	**0.9233**

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed, mph	Climate of the States (Tampa, FL), Third Edition, 1985.
Material Moisture Content	TEC, 2001.
Material Transfer Point Identification	ECT, 2001.
Material Transfer Rates	TEC, 2001.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by:	S. Todd	Date:	6/01
Evaluated by:	T. Davis	Date:	6/01
Data Entered by:	T. Davis	Date:	6/01

EMISSION INVENTORY WORKSHEET

FUG-PM10

Tampa Electric Company - Polk Power Station

EMISSION SOURCE TYPE

FUGITIVE PM_{10} - MATERIAL TRANSFER (DROPS) — **Figure:**

FACILITY AND SOURCE DESCRIPTION

Emission Source Description:	Fugitive PM_{10} - Polk Power Station Coal Residual (Drops)
Emission Control Method(s)/ID No.(s):	Moist material, enclosures
Emission Point ID:	FUG-PM_{10}

EMISSION ESTIMATION EQUATIONS

PM_{10} Emission (lb/hr) = 0.35 x 0.0032 x [(Wind Speed/5)$^{1.3}$ / (Material Moisture Content/2)$^{1.4}$] x Material Handled (ton/hr)

PM_{10} Emission (ton/yr) = 0.35 x 0.0032 x [(Wind Speed/5)$^{1.3}$ / (Material Moisture Content/2)$^{1.4}$] x Material Handled (ton/yr) x (1 ton/2,000 lb)

Source: Section 13.2-4, AP-42, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed: 8.6 mph

Material Moisture Content: 1.0 weight %

Material Transfer Point	Source ID	Material Transfer Rates (lb/hr)	Material Transfer Rates (tpy)	Uncontrolled Emission Factor (lb PM/ton)	Control Efficiency (%)	Controlled Emission Factor (lb PM/ton)	Potential PM_{10} Emission Rates (lb)	Potential PM_{10} Emission Rates (tons)
Front-End Loader to Inlet Feed Hopper	SF-1	200,000	73,000	0.005982	0.0	0.005982	0.59820	0.21834
Belt Conveyor to Slurry Blunger	SF-2	200,000	73,000	0.005982	0.0	0.005982	0.59820	0.21834
						Totals	**1.1964**	**0.4367**

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed, mph	Climate of the States (Tampa, FL), Third Edition, 1985.
Material Moisture Content	TEC, 2001.
Material Transfer Point Identification	ECT, 2001.
Material Transfer Rates	TEC, 2001.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by:	S. Todd	Date:	6/01
Evaluated by:	T. Davis	Date:	6/01
Data Entered by:	T. Davis	Date:	6/01

ATTACHMENT IV

TAMPA ELECTRIC COMPANY
POLK POWER STATION
COAL RESIDUAL BENEFICIATION

Professional Engineer Certification

Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the permit exemption requested by Tampa Electric Company for the Polk Power Station residual coal beneficiation process is in accordance with all applicable Florida Statutes and rules of the Department of Environmental Protection; and

(2) 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 air pollutants not regulated for an emissions unit, based solely upon the materials, information and calculations provided with this certification.

Thomas A. Davis — 6/21/01

Signature — Date

(seal)

* Certification is applicable to the permit exemption request for the Tampa Electric Company Polk Power Station coal residual beneficiation process.

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

July 23, 2001

Ms. Laura R. Crouch
Manager – Air Programs
Environmental Affairs
Tampa Electric Company
6499 U.S. Highway 41 North
Apollo Beach, FL 33572-9200

Re: Tampa Electric Polk Power Station
Coal Residual Beneficiation

Dear Ms. Crouch:

The Department has received your letter dated June 25, 2001, which requests confirmation that the coal residual beneficiation process planned for the Polk Power Station qualifies for the generic emissions unit exemption pursuant to Rule 62-210.300(3)(b)1., F.A.C.

As the potential particulate matter emissions from this process are projected to be less than one ton per year; there is no unit-specific applicable requirement; and the particulate matter emissions, in combination with the emissions of other units and activities at the facility, would not result in a modification subject to preconstruction review requirements; the Department hereby confirms that the coal residual beneficiation process planned for the Polk Power Station qualifies for the generic emissions unit permit exemption pursuant to Rule 62-210.300(3)(b)1., F.A.C.

At the time of application for renewal of the Title V Operation Permit for this facility, please include this emissions unit in the list of Insignificant Emissions Units.

Please contact Mr. Buck Oven of the Department's Siting Coordination Office to address any necessary revisions to the Polk Power Station's Site Certification.

Sincerely,

for C. H. Fancy, P.E., Chief
Bureau of Air Regulation

c: Mr. Buck Oven, FDEP
Mr. Bill Thomas, SWD-FDEP

TAMPA ELECTRIC

October 4, 2002

Mr. Al Linero, P.E.
Acting Bureau Chief
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, FL 32301

Via FedEx
Airbill No. 7900 9621 7336

Re: Tampa Electric Company
Exemption from Permitting Request
Modified Coal Residual Beneficiation Process

Dear Mr. Linero:

Tampa Electric Company (TEC) requests a permit exemption from the Florida Department of Environmental Protection (FDEP) in modifying the Charah process as described in the following paragraphs.

As you know, TEC presently generates coal residual material, or slag, at its Polk Power Station as a by-product of the coal gasification process. This material is processed at the Charah plant, which separates the materials into coarse, intermediate, and fine fractions. The Charah process was described in an attachment to the previously submitted permit exemption request letter dated June 25, 2001. The coarse fraction is shipped offsite to be used in the cement industry, and the intermediate fraction is reused as a fuel at TEC's Big Bend Station. The recycled fine fraction, however, has no current application and is accumulating onsite. TEC has agreed to comply with FDEP (Consent Order #01-0122), which requires that TEC not store any coal residual material or slag on the temporary liner as of May 2003.

As a way of disposing the accumulated recycled fines in an environmentally responsible manner, TEC is planning to re-introduce them into the Charah plant, where they will be combined with slurry from the settlers and make-up water (as needed) in an existing blunger. The resulting suspension will be pumped out and combined with the main gasifier feed. Reintroduction of the recycled fines into the gasification process is not expected to affect the nature of the combustion turbine emissions, as the material is already being processed in the gasifier. The incoming mixed slag will bypass the blunger system initially, but will undergo the separation process as before. The process is still an inherently wet process, and therefore will have insignificant fugitive particulate matter (PM) emissions (less than one ton per year).

Process flow diagrams (for the current system as well as the alternate operation), and PM emission estimates are included with this letter as Attachment C, D, and E, respectively. Attachment A enclosed is the Responsible Official signature and the professional engineer certification is provided as Attachment B.

Based on the above, TEC believes that the Charah process (which was previously determined to be exempt from permitting by FDEP) should still be exempt after the proposed modifications, under the generic emissions unit exemption of Rule 62-210.300(3)(b)1., F.A.C. Department confirmation of this exemption from permitting is requested. If you have any questions regarding this matter, please feel free to contact Dru Latchman or me at (813) 641-5034.

Sincerely,

Laura R. Crouch

Laura R. Crouch
Manager-Air Programs
Environmental Affairs

EA/bmr/DNL132

Enclosures

cc/enc: Mr. Jerry Kissel, FDEP SW
Mr. Buck Oven

ATTACHMENT A

TAMPA ELECTRIC COMPANY
POLK POWER STATION

Responsible Official Signature

Attachment A- Responsible Official Certification

I have reviewed the information contained in this letter. I hereby certify that these documents are authentic and accurate to the best of my knowledge.

Date: 10/04/02

Signature: Mark Hornick
General Manager
Polk Power Station

ATTACHMENT B

TAMPA ELECTRIC COMPANY
POLK POWER STATION

Professional Engineer's Certification

ATTACHMENT B

Professional Engineer Certification

1. Professional Engineer Name: Daniel N. Hlaing
   Registration Number: 45058

2. Professional Engineer Mailing Address:
   Organization/Firm: Environmental Consulting & Technology, Inc.
   Street Address: 3701 NW 98th Street
   City: Gainesville State: FL Zip Code: 32606-5004

3. Professional Engineer Telephone Numbers:
   Telephone: (352) 332-0444 Fax: (352) 332-6722

4. Professional Engineer Statement:

   I, the undersigned, hereby certify that:

   (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit described in this submittal, when properly operated and maintained, will comply with all applicable regulations for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

   (2) To the best of my knowledge, emission estimates reported or relied on in this application are true, accurate, and complete and are based upon reasonable techniques available for calculating emissions.

   The purpose of this submittal is to obtain an exemption from air construction permitting for proposed modifications to the existing Charah process at Tampa Electric Company's Polk Power Station. I further certify that the process flow diagrams in this submittal have been examined by me and were found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

Signature _____ Date 10/3/02

(seal)

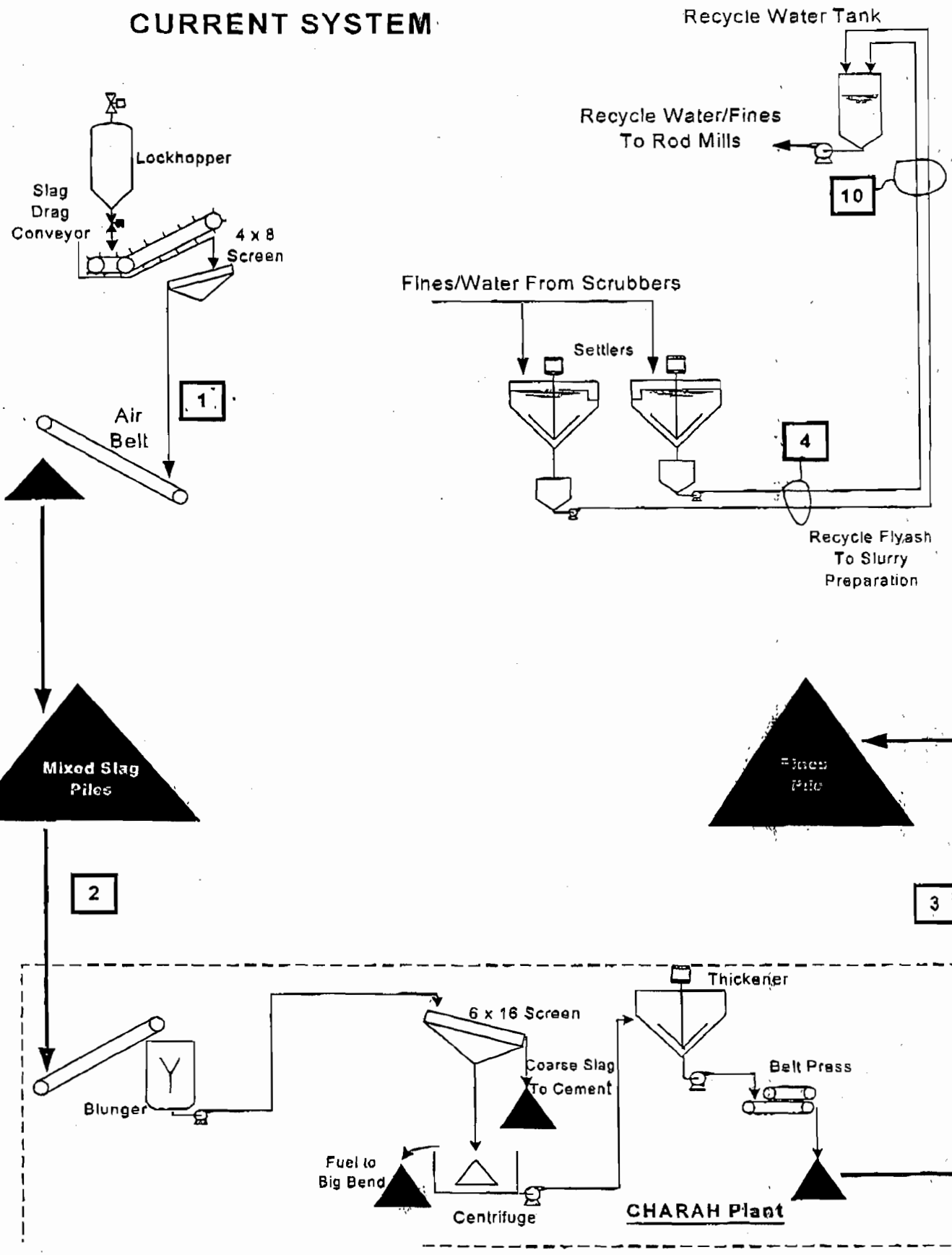
ATTACHMENT C

TAMPA ELECTRIC COMPANY
POLK POWER STATION

Process Flow Diagram of the Current Coal Residual Beneficiation System

ATTACHMENT C

Current Charah System



ATTACHMENT D

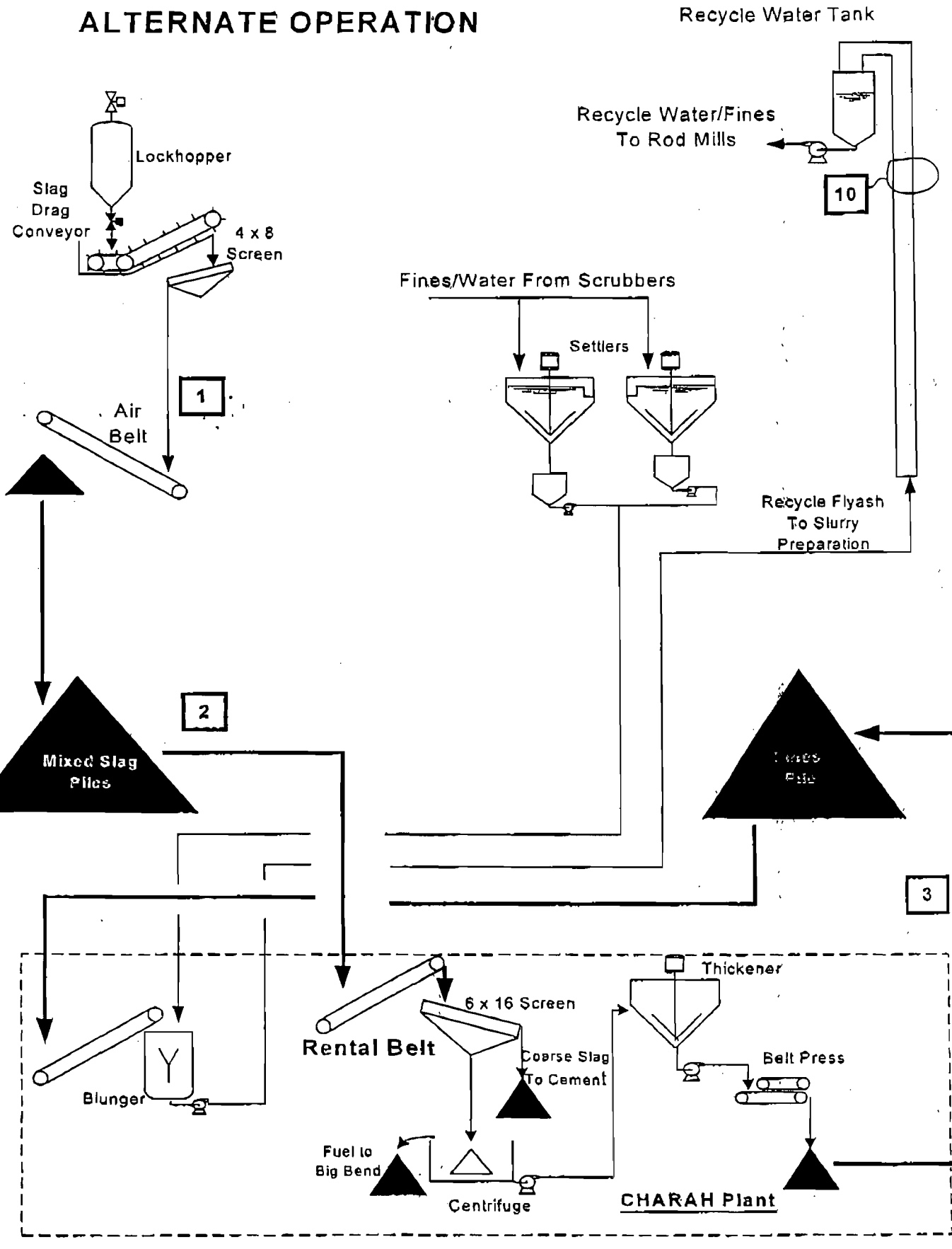
TAMPA ELECTRIC COMPANY
POLK POWER STATION

Process Flow Diagram of the Alternate Coal Residual Beneficiation System

ATTACHMENT D

New Charah System

ALTERNATE OPERATION



ATTACHMENT E

TAMPA ELECTRIC COMPANY
POLK POWER STATION

PM Emission Estimates

The Charah beneficiation process with the proposed modifications will still be a wet process and therefore will have insignificant emissions of particulate matter (PM).

Potential fugitive PM emission points include:

- Transfer of slag from the existing mixed slag stockpile to the rental conveyor belt by front-end loader;
- Transfer of slag from the rental conveyor belt to screens;
- Screening of the mixed slag (Spray water is added at the primary screen at a minimum of 350 gallons per minute to wash fines from the oversized materials);
- Transfer of recycled fines from the temporary stockpile to the conveyor belt at the existing blunger system; and
- Transfer of the recycled fines from the conveyor belt to the blunger tank (The blunger tank is equipped with a plastic cover).

PM emission estimates are performed using the United States Environmental Protection Agency's (U.S. EPA's) AP-42 emission factors. AP-42 Section 13.2.4 (January 1995) contains emission factor estimating equations based on wind speed and moisture content. The equations are rated "A" (which is the highest quality rating), if reliable site specific data are used. PM emissions from the screening operations are based on an emission factor in AP-42 Section 11.9.2 (January 1995) for screening in the crushed stone industry. The AP-42 PM_{10} emission factor of 0.015 lb/ton was multiplied by 2.1 to yield a total PM emission factor of 0.032 lb/ton. These emission factors were further adjusted to account for the high moisture content of the residual materials at PPS. The moisture content in the study group for the AP-42 emission factor ranged from 0.21 to 1.3%. Since the moisture content of the mixed slag as well as the recycled fines are significantly higher (averaged 30% and 50%, respectively), the dust suppression credit of 95% is adequately justified, based on the fact that PM_{10} control efficiencies from water spraying are projected to be upwards of 95% if the ratio of controlled to uncontrolled surface moisture contents is greater than 5 (EPA-450/2-92-004, September 1992).

Estimated PM emissions are shown in the following tables.

Estimated PM_{10} Emissions from Polk Power Station's Modified CHARAH Process

EP ID	Process Description	Emission Factors		Emission Factor Source	Operating Parameters*				Control Type	Control Efficiency	Potential PM_{10} Emissions	
		Factor	Units		*tpy*	*lb/hr*	*tpd*	*hr/yr*		*(%)*	*(tpy)*	*(lb/hr)*
1	Mixed Slag to Rental Belt by Loader	6.60E-05	*lb/ton*	AP-42, 13.2.4 (1/95)	876,000	200,000	2,400	8,760	None	0	0.0289	0.0066
2	Rental Belt to Screens	6.60E-05	*lb/ton*	AP-42, 13.2.4 (1/95)	876,000	200,000	2,400	8,760	Water Sprays*	50	0.0145	0.0033
3	Screening	7.50E-04	*lb/ton*	AP-42, 11.19.2 (1/95)	876,000	200,000	2,400	8,760	Water Sprays*	50	0.1643	0.0375
4	Residual Fines to Conveyor Belt	6.60E-05	*lb/ton*	AP-42, 13.2.4 (1/95)	109,500	25,000	300	8,760	None	0	0.0036	0.0008
5	Conveyor Belt to Blunger	6.60E-05	*lb/ton*	AP-42, 13.2.4 (1/95)	109,500	25,000	300	8,760	Plastic Cover	50	0.0018	0.0004
	TOTALS										**0.21**	**0.05**

Estimated Total PM Emissions from Polk Power Station's Modified CHARAH Process

EP ID	Process Description	Emission Factors		Emission Factor Source	Operating Parameters				Control Type	Control Efficiency	Potential PM Emissions	
		Factor	Units		*tpy*	*lb/hr*	*tpd*	*hr/yr*		*(%)*	*(tpy)*	*(lb/hr)*
1	Mixed Slag to Rental Belt by Loader	1.40E-04	*lb/ton*	AP-42, 13.2.4 (1/95)	876,000	200,000	2,400	8,760	None	0	0.0611	0.0140
2	Rental Belt to Screens	1.40E-04	*lb/ton*	AP-42, 13.2.4 (1/95)	876,000	200,000	2,400	8,760	Water Sprays*	50	0.0306	0.0070
3	Screening	1.58E-03	*lb/ton*	AP-42, 11.19.2 (1/95)	876,000	200,000	2,400	8,760	Water Sprays*	50	0.3449	0.0788
4	Residual Fines to Conveyor Belt	1.40E-04	*lb/ton*	AP-42, 13.2.4 (1/95)	109,500	25,000	300	8,760	None	0	0.0076	0.0017
5	Conveyor Belt to Blunger	1.40E-04	*lb/ton*	AP-42, 13.2.4 (1/95)	109,500	25,000	300	8,760	Plastic Cover	50	0.0038	0.0009
	TOTALS										**0.45**	**0.10**

Note:

Emission Factor = k * 0.0032 * (U/5)^1.3 / (M/2)^1.4 lb/ton

where k = 0.35 for PM-10, 0.74 for PM, U (wind speed) = 8.6 mph (Gale, 3rd Ed., Tampa Airport, 1951-1980), M(moisture content) = 25% (minimum)

The AP-42 screening emission factors (0.015 and 0.032 lb/ton for PM-10 and PM, respectively) have been adjusted to include the 95% dust suppression due to high moisture content.

Operating parameters (thoughput rates) are based on recylced fines. Throughput rates for biomass will be less.

EP = Emission Point, N/A = Not Applicable

tpy = tons per year, tph = tons per hour, lb = pounds, yr = year, hr = hours

PM = Particulate Matter, PM_{10} = Particulate Matter Less than 10 micron in aerodynamic diameter

* Water sprays are integral part of the process (i.e., the screens will not operate without them); 350 gal/min (minimum)

Sources: TEC, 2002; U.S. EPA, 1995-1998; ECT, 2002.