

**POLK POWER STATION
UNITS 2 AND 3**

**TITLE V OPERATION PERMIT
REVISION APPLICATION**

Prepared for:



**TAMPA ELECTRIC
Tampa, Florida**

Prepared by:



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

ECT No. 010888-0400

September 2002

RECEIVED

OCT 07 2002

INTRODUCTION

BUREAU OF AIR REGULATION

The existing Tampa Electric Company (TEC) Polk Power Station is an electric generation facility located near Mulberry, Polk County, Florida. The Polk Power Station coal gasification facility consists of solid fuel handling facilities, a solid fuel gasification system, one nominal 260 megawatt (MW) combined cycle combustion turbine (designated as Unit 1) fired with syngas or distillate fuel oil, an auxiliary boiler, a sulfuric acid plant, slag handling systems, and other ancillary equipment. Operation of the existing Polk Power Station coal gasification facility emission sources is currently authorized by Title V FINAL Permit Revision No. 1050233-009-AV. FINAL Permit Revision No. 1050233-009-AV was issued with an effective date of January 1, 2000 and expires on December 31, 2004.

TEC recently constructed and placed in operation two (2) General Electric Model PG7241 FA dual-fuel, simple-cycle combustion turbine generators (CTGs) at the Polk Power Station. The simple-cycle CTGs are designated as Units 2 and 3. The simple-cycle CTGs each have a nominal power output of 16 MW and are fired primarily with pipeline quality natural gas with low sulfur distillate fuel oil serving as a back-up fuel source. Each simple-cycle CTG operates for no more than 4,380 hours per year (hr/yr) when firing natural gas and no more than 750 hr/yr when firing distillate fuel oil.

An air construction permit was required prior to the commencement of construction of Units 2 and 3, per Rule 62-212.300(1)(a), Florida Administrative Code (F.A.C.). TEC submitted an air construction permit application to the Florida Department of Environmental Protection (FDEP) in February 1999. In response, FDEP issued FINAL Permit Number PSD-FL-263 on October 8, 1999 authorizing construction and initial operation of the two simple-cycle CTGs. FINAL Permit Number PSD-FL-263 expires on December 31, 2002.

Units 2 and 3 commenced operation on June 29, 2000 and April 6, 2001, respectively. Initial compliance testing, as required by FINAL Permit Number PSD-FL-263, Section

III, Specific Condition No. 28 (testing for nitrogen oxides [NO_x], carbon monoxide (CO), volatile organic compounds (VOC), and visible emissions [VE]), was conducted on September 13 and 15, 2000 (Unit 2 – distillate fuel oil), October 7, 2000 (Unit 2 – natural gas), May 7 and 9, 2002 (Unit 3 – natural gas), and May 8, 2002 (Unit 3 – distillate fuel oil). The initial emissions performance testing demonstrated that Units 2 and 3 were operating in compliance with all applicable permit emission limits. Reports of the initial performance testing was submitted to the FDEP's Southwest District Office on November 10 and 21, 2000 (for Unit 2) and June 21, 2002 (for Unit 3).

Permit No. PSD-FL-263, Section II., Condition No. 10 requires the submittal of a Title V operating permit to the DEP's Bureau of Air Regulation, with a copy to the Department's Southwest District, in accordance with Chapter 62-213, F.A.C. Rule 62-213.420(1)(a)5., F.A.C., indicates that a Title V source which commences operation on or before October 25, 1995, but which contains an emission unit that commences operation after October 25, 1995, shall submit a revision to its Title V permit application, or an application for a permit revision, as applicable, no later than 180 days after the emissions unit commences operation.

Units 2 and 3 commenced operation on June 29, 2000 and April 6, 2002, respectively. In accordance with prior Department guidance and to avoid multiple Title V permit revisions, the application for a revision to Polk Power Station Title V FINAL Permit Revision No. 1050233-009-AV to include simple-cycle combustion turbine Units 2 and 3 is required to be submitted to the Department within 180 days following commencement of operation of Unit 3; i.e., no later than October 3, 2002. This permit application, using DEP Form No. 62-210.900(1), *Application for Air Permit – Title V Source*, constitutes TEC's application to revise Title V FINAL Permit Revision No. 1050233-009-AV to include the two simple-cycle CTGs pursuant to the requirements of FINAL Permit No. PSD-FL-263 and Chapter 62-213, F.A.C.

Following this introduction, the Department's *Application for Air Permit – Title V Source*, is provided in Appendix A. The current FDEP air construction permit for Units 2 and 3 is provided in Appendix B.

APPENDIX A

**APPLICATION FOR AIR PERMIT
TITLE V SOURCE**



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

RECEIVED
OCT 07 2002

BUREAU OF AIR REGULATION

Identification of Facility

1. Facility Owner/Company Name: Tampa Electric Company	
2. Site Name: Polk Power Station	
3. Facility Identification Number: 1050233 [] Unknown	
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 [<input checked="" type="checkbox"/>] No	6. Existing Permitted Facility? [<input checked="" type="checkbox"/>] Yes [] No

Application Contact

1. Name and Title of Application Contact: 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 Fax: (813) 641-5081	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	10/7/02
2. Permit Number:	1050233-009-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

- Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: PSD-FL-263

Operation permit number to be revised: FINAL Permit Revision No. 1050233-009-AV

- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

- Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: _____


Reason for revision: _____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Air construction permit to construct or modify one or more emissions units.
- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Mark J. Hornick, General Manager
2. Application Contact Mailing Address: Organization/Firm: Tampa Electric Company Street Address: P.O. Box 111 City: Tampa State: FL Zip Code: 33601-0111
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (813) 228-1111, Ext. 39988 Fax: (863) 428-5927
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [<input checked="" type="checkbox"/>], if so) or the responsible official (check here [<input type="checkbox"/>], if so) of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.</i>  Signature _____ Date <u>10/04/02</u>

* Attach letter of authorization if not currently on file.

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: 32606-5004
3. Professional Engineer Telephone Numbers: Telephone: (352) 332-0444 Fax: (352) 332-6722

4. 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.

If the purpose of this application is to obtain a Title V source 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision 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

(Seal)

Date

9/30/02

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
009	165 Megawatt Simple Cycle Combustion Turbine Generator Unit No. 2	N/A	N/A
010	165 Megawatt Simple Cycle Combustion Turbine Generator Unit No. 3	N/A	N/A

Application Processing Fee

Check one: [] Attached - Amount: \$ _____ [] Not Applicable

Note: Polk Power Station has been issued FINAL Title V Permit 1050233-009-AV. An application processing fee is not required pursuant to Rule 62-213.205(4), F.A.C.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Tampa Electric Company (TEC) has installed two (2) General Electric Model PG7241 FA dual-fuel, simple cycle combustion turbine generators (CTGs) at its existing Polk Power Station. Each simple cycle CTG has a nominal power output of 165 megawatts (MW). Construction and initial operation of the simple cycle CTGs was authorized by Department Permit No. PSD-FL-263 issued on October 8, 1999 and expiring on December 31, 2002.

The simple cycle CTGs are fired primarily with pipeline quality natural gas with low sulfur distillate fuel oil serving as a back-up fuel source. Each simple-cycle CTG operates for no more than 4,380 hours per year when firing natural gas and no more than 750 hours per year when firing distillate fuel oil.

2. Projected or Actual Date of Commencement of Construction:

June 29, 2000 (Unit 2); April 6, 2002 (Unit 3)

3. Projected Date of Completion of Construction: N/A

Application Comment

[Empty box for Application Comment]

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:	4. Facility Status Code:	5. Facility Major Group SIC Code:	6. Facility SIC(s):
0	A	49	4911
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact:			
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	

Facility Regulatory Classifications

Check all that apply:

1. [] Small Business Stationary Source?	[] Unknown
2. [✓] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. [] Synthetic Minor Source of Pollutants Other than HAPs?	
4. [] Major Source of Hazardous Air Pollutants (HAPs)?	
5. [✓] Synthetic Minor Source of HAPs?	
6. [✓] One or More Emissions Units Subject to NSPS?	
7. [] One or More Emission Units Subject to NESHAP?	
8. [] Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	

List of Applicable Regulations

Reference Attachment A-1 of the February 1999 Air Construction Permit Application.	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
NOX	A	N/A	N/A	N/A	
SO2	A	N/A	N/A	N/A	
CO	A	N/A	N/A	N/A	
PM10	A	N/A	N/A	N/A	
PM	A	N/A	N/A	N/A	
SAM	A	N/A	N/A	N/A	
VOC	A	N/A	N/A	N/A	
PB	B	N/A	N/A	N/A	

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [] Attached, Document ID: [✓] Not Applicable [] Waiver Requested See Figures 2-1, 2-2, and 2-3 of the February 1999 Air Construction Permit Application
2. Facility Plot Plan: [] Attached, Document ID: [✓] Not Applicable [] Waiver Requested See Figure 2-4 of the February 1999 Air Construction Permit Application
3. Process Flow Diagram(s): [] Attached, Document ID: [✓] Not Applicable [] Waiver Requested See Figure 2-5 of the February 1999 Air Construction Permit Application
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [] Attached, Document ID: [✓] Not Applicable [] Waiver Requested See Attachment A-2 of the February 1999 Air Construction Permit Application
5. Fugitive Emissions Identification: [] Attached, Document ID: _____ [✓] Not Applicable [] Waiver Requested
6. Supplemental Information for Construction Permit Application: [] Attached, Document ID: [✓] Not Applicable
7. Supplemental Requirements Comment: Items 1. through 4. above were submitted within the previous five years. These original submittals remain unchanged and therefore need not be resubmitted per the Department's instructions for DEP Form 62-210.900(1).

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>DOC. II.C.14</u> <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input checked="" type="checkbox"/> Attached, Document ID: <u>DOC. II.C.15</u> <input type="checkbox"/> Not Applicable

Items 8. through 13. above previously submitted – reference Polk Power Station initial Title V permit application and 1999 Risk Management Plan (RMP).

Emissions Unit Information Section 1 of 2

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Emission unit consists of one General Electric (GE) 7241 FA simple-cycle combustion turbine generator (CTG) having a nominal rating of 165 megawatts (MW). The CTG will be fired primarily using pipeline quality natural gas with low-sulfur distillate fuel oil serving as a back-up fuel.</p>			
<p>4. Emissions Unit Identification Number: ID: 009 (Unit 2)</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: June 29, 2000</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> 			

Emissions Unit Information Section 1 of 2

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

NO_x Controls

Dry low-NO_x combustors (natural gas-firing)

Water injection (distillate fuel-oil firing)

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

Emissions Unit Details

1. Package Unit:		
Manufacturer: General Electric		Model Number: PG7241(FA)
2. Generator Nameplate Rating: 175.8 MW		
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1,800 (LHV)	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	5,130* hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p>Maximum heat input 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.</p> <p>* Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).</p>		

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

Previously submitted - reference Attachment A-1 of the February 1999 Air Construction Permit Application.	

Emissions Unit Information Section 1 of 2

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

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 (limit to 100 characters per point): 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: %	
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 Comment (limit to 200 characters): 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.			

Emissions Unit Information Section 1 of 2

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 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:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 923
10. Segment Comment (limit to 200 characters): Fuel heat content (Field 9) represents lower heating value (LHV).		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 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:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash: 0.01	9. Million Btu per SCC Unit: 134
10. Segment Comment (limit to 200 characters): Fuel heat content (Field 9) represents lower heating value (LHV).		

Emissions Unit Information Section 1 of 2

**F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)**

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

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
 (Regulated Emissions Units -
 Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOX		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 319.0 lb/hour		4. Synthetically Limited? [<input checked="" type="checkbox"/>]	
		270.3 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 319.0 lb/hr Reference: Allowable Emission Rate		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 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 (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested 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 (limit to 60 characters): NO_x CEMS			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Unit is also subject to less stringent NO_x limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for natural gas-firing.			

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 2 of 12

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 42 ppmvd @ 15% O₂ (3-Hour Block Average)	4. Equivalent Allowable Emissions: 319.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): NO_x CEMS	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Unit is also subject to less stringent NO_x limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil-firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 319.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 319.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Methods 7E and 19 annually. Annual NO_x 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 (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Unit is also subject to less stringent NO_x limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
 (Regulated Emissions Units -
 Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 65.0 lb/hour	4. Synthetically Limited? [<input checked="" type="checkbox"/>] 107.6 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 65.0 lb/hr Reference: Allowable emission rate	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 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 65.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).	

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 12 ppmvd	4. Equivalent Allowable Emissions: 38.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Method 10 annually.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 4 of 12

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 38.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 38.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Methods 10 and 19 annually.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 20 ppmvd	4. Equivalent Allowable Emissions: 65.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Method 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 (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 5 of 12

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 65.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 65.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Methods 10 and 19 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 (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7.0 lb/hour	4. Synthetically Limited? [<input checked="" type="checkbox"/>] 8.8 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 7.0 lb/hr Reference: Allowable emission rate	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 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 7.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).	

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.4 ppmvw	4. Equivalent Allowable Emissions: 2.8 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 7 of 12

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.8 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 2.8 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3.5 ppmvw	4. Equivalent Allowable Emissions: 7.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 8 of 12

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 7.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 7.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
 (Regulated Emissions Units -
 Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 98.1 lb/hour	4. Synthetically Limited? <input checked="" type="checkbox"/> 56.9 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 98.1 lb/hr Reference: Allowable emission rate	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 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 98.1 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 9.2 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 9.2 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Use of pipeline quality natural gas. Natural gas sulfur content monitored using applicable 40 CFR Part 75 Appendix D procedures.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 10 of 12

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested 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 (limit to 60 characters): 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 procedures.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM/PM10		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 17.0 lb/hour		4. Synthetically Limited? [<input checked="" type="checkbox"/>] 26.1 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 17.0 lb/hr Reference: GE data		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 9.0 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 17.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).			

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 10% opacity		4. Equivalent Allowable Emissions: 9.0 lb/hour N/A tons/year	
5. Method of Compliance (limit to 60 characters): EPA Reference Method 9 annually.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.			

Emissions Unit Information Section 1 of 2
Pollutant Detail Information Page 12 of 12

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 10 % opacity	4. Equivalent Allowable Emissions: 17.0 lb/hour N/A tons/year
5. Method of Compliance (limit to 60 characters): EPA Reference Method 9 annually.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested 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 (limit to 200 characters): Rule 62-212.400(5)(c), F.A.C. (BACT)	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: * % Maximum Period of Excess Opacity Allowed: * min/hour	
4. Method of Compliance: N/A	
5. Visible Emissions Comment (limit to 200 characters): *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). Final Permit No. PSD-FL-263, Condition No. 24.	

Emissions Unit Information Section 1 of 2

I. CONTINUOUS MONITOR INFORMATION
 (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Thermo Environmental Instruments Model Number: 42C Serial Number: 42C-64578-344	
5. Installation Date: 6/25/2000	6. Performance Specification Test Date: 9/6/2000
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 (Acid Rain Program).	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: CO₂	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Siemens Model Number: Ultramat 6 Serial Number: F-NR.N1-LN-0395	
5. Installation Date: 6/25/2000	6. Performance Specification Test Date: 9/6/2000
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 (Acid Rain Program).	

Emissions Unit Information Section 1 of 2

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested See Figure 2-5 of the February 1999 Air Construction Permit Application.
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested See Attachment A-3 of the February 1999 Air Construction Permit Application.
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested See Section 5.0 of the February 1999 Air Construction Permit Application.
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Included with Compliance Test Report
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: <u>11/10/2000 and 11/21/2000</u> <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment: Items 1. through 3. above were submitted within the previous five years. These original submittals remain unchanged and therefore need not be resubmitted per the Department's instructions for DEP Form 62-210.900(1).

Emissions Unit Information Section 1 of 2

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>DOC. III. J.11</u> <input type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Item 15 previously submitted.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Emission unit consists of one General Electric (GE) 7241 FA simple-cycle combustion turbine generator (CTG) having a nominal rating of 165 megawatts (MW). The CTG will be fired primarily using pipeline quality natural gas with low-sulfur distillate fuel oil serving as a back-up fuel.</p>			
<p>4. Emissions Unit Identification Number: ID: 010 (Unit 3)</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: April 6, 2002</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p>			

Emissions Unit Information Section 2 of 2

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

NO_x Controls

Dry low-NO_x combustors (natural gas-firing)

Water injection (distillate fuel-oil firing)

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

Emissions Unit Details

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

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

3. Incinerator Information:
Dwell Temperature: °F
Dwell Time: seconds
Incinerator Afterburner Temperature: °F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1,800 (LHV)	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	5,130* hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p>Maximum heat input 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.</p> <p>* Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).</p>		

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

Previously submitted - reference Attachment A-1 of the February 1999 Air Construction Permit Application.	

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

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 (limit to 100 characters per point): 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: %	
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 Comment (limit to 200 characters): 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.			

Emissions Unit Information Section 2 of 2

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 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:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 923
10. Segment Comment (limit to 200 characters): Fuel heat content (Field 9) represents lower heating value (LHV).		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 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:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash: 0.01	9. Million Btu per SCC Unit: 134
10. Segment Comment (limit to 200 characters): Fuel heat content (Field 9) represents lower heating value (LHV).		

Emissions Unit Information Section 2 of 2

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

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

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
 (Regulated Emissions Units -
 Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOX		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 319.0 lb/hour		4. Synthetically Limited? [<input checked="" type="checkbox"/>] 270.3 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 319.0 lb/hr Reference: Allowable Emission Rate		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 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 (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested 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 (limit to 60 characters): NO_x CEMS			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Unit is also subject to less stringent NO_x limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for natural gas-firing.			

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 2 of 12

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 42 ppmvd @ 15% O₂ (3-Hour Block Average)	4. Equivalent Allowable Emissions: 319.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): NO_x CEMS	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Unit is also subject to less stringent NO_x limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil-firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 319.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 319.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Methods 7E and 19 annually. Annual NO_x 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 (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Unit is also subject to less stringent NO_x limits of 40 CFR Part 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 65.0 lb/hour	107.6 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 65.0 lb/hr Reference: Allowable emission rate		7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 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 65.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).		

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 12 ppmvd	4. Equivalent Allowable Emissions: 38.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Method 10 annually.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 4 of 12

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 38.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 38.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Methods 10 and 19 annually.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 20 ppmvd	4. Equivalent Allowable Emissions: 65.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Method 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 (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 5 of 12

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 65.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 65.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): EPA Reference Methods 10 and 19 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 (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 7.0 lb/hour		4. Synthetically Limited? <input checked="" type="checkbox"/> 8.8 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 7.0 lb/hr Reference: Allowable emission rate		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 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 7.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).			

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 1.4 ppmvw		4. Equivalent Allowable Emissions: 2.8 lb/hour N/A tons/year (At ISO Conditions)	
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.			

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 7 of 12

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.8 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 2.8 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.	

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3.5 ppmvw	4. Equivalent Allowable Emissions: 7.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 8 of 12

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 7.0 lb/hr (At ISO Conditions)	4. Equivalent Allowable Emissions: 7.0 lb/hour N/A tons/year (At ISO Conditions)
5. Method of Compliance (limit to 60 characters): Compliance with CO emission limit serves as a surrogate.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
 (Regulated Emissions Units -
 Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 98.1 lb/hour		4. Synthetically Limited? <input checked="" type="checkbox"/> [✓] 56.9 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 98.1 lb/hr Reference: Allowable emission rate		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 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 98.1 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).			

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 9.2 lb/hr (At ISO Conditions)		4. Equivalent Allowable Emissions: 9.2 lb/hour N/A tons/year (At ISO Conditions)	
5. Method of Compliance (limit to 60 characters): Use of pipeline quality natural gas. Natural gas sulfur content monitored using applicable 40 CFR Part 75 Appendix D procedures.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.			

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 10 of 12

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested 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 (limit to 60 characters): 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 procedures.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM/PM10		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 17.0 lb/hour		4. Synthetically Limited? <input checked="" type="checkbox"/> [✓]	
		26.1 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 17.0 lb/hr Reference: GE data		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Hourly emission rate based on allowable emission rate for 100 percent load, 59°F, fuel oil-firing case. Annual emissions based on 9.0 lb/hr (100 percent load, 59°F, natural gas-firing case) for 4,380 hrs/yr and 17.0 lb/hr (100 percent load, 59°F, distillate fuel oil-firing case) for 750 hrs/yr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Maximum of 4,380 hours per year (natural gas-firing) and 750 hours per year (distillate fuel oil-firing).			

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 10% opacity		4. Equivalent Allowable Emissions: 9.0 lb/hour N/A tons/year	
5. Method of Compliance (limit to 60 characters): EPA Reference Method 9 annually.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for natural gas-firing.			

Emissions Unit Information Section 2 of 2
Pollutant Detail Information Page 12 of 12

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 10 % opacity	4. Equivalent Allowable Emissions: 17.0 lb/hour N/A tons/year
5. Method of Compliance (limit to 60 characters): EPA Reference Method 9 annually.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): FDEP Rule 62-212.400(5)(c), F.A.C. (BACT) Limit applicable for distillate fuel oil-firing.	

Emissions Unit Information Section 2 of 2

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested 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 (limit to 200 characters): Rule 62-212.400(5)(c), F.A.C. (BACT)	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: [<input type="checkbox"/>] Rule [<input checked="" type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: * % Maximum Period of Excess Opacity Allowed: * min/hour	
4. Method of Compliance: N/A	
5. Visible Emissions Comment (limit to 200 characters): *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). Final Permit No. PSD-FL-263, Condition No. 24.	

Emissions Unit Information Section 2 of 2

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	[<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
4. Monitor Information: Manufacturer: Thermo Environmental Instruments Model Number: 42C Serial Number: 42C-70630-366	
5. Installation Date: 5/1/2002	6. Performance Specification Test Date: 5/7/2002
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 (Acid Rain Program).	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: CO₂	2. Pollutant(s):
3. CMS Requirement:	[<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
4. Monitor Information: Manufacturer: Siemens Model Number: Ultramat 6 Serial Number: F-NR.N1-N5-0675	
5. Installation Date: 5/1/2002	6. Performance Specification Test Date: 5/7/2002
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 (Acid Rain Program).	

Emissions Unit Information Section 2 of 2

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested See Figure 2-5 of the February 1999 Air Construction Permit Application.
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested See Attachment A-3 of the February 1999 Air Construction Permit Application.
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested See Section 5.0 of the February 1999 Air Construction Permit Application.
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Included with Compliance Test Report
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: <u>6/21/2002</u> <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment: Items 1. through 3. above were submitted within the previous five years. These original submittals remain unchanged and therefore need not be resubmitted per the Department's instructions for DEP Form 62-210.900(1).

Emissions Unit Information Section 2 of 2

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>DOC. III. J.11</u> <input type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Item 15 previously submitted.

DOC.II.C.14 AND DOC.II.C.15

**COMPLIANCE REPORT AND PLAN
COMPLIANCE CERTIFICATION**

**COMPLIANCE REPORT, PLAN,
AND CERTIFICATION**

1. Compliance Report and Plan

Appendix A of the initial Polk Power Station Title V operation permit application, Permit No. PSD-FL-263, and FINAL Title V Permit Revision No. 1050233-009-AV identify 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 consistent with FDEP Rule 62-213.440(3)(a)2., 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
General Manager – Polk Power Station

Date

DOC.III.J.11

ALTERNATE METHODS OF OPERATION

DOC.III.J.11
Tampa Electric Company – Polk Power Station
Units 2 and 3: Alternate Methods of Operation

Method No.	Simple Cycle	Natural Gas Firing	Distillate Fuel Oil Firing	Annual Operating Hours (Hrs/Yr)
1	✓	✓		4,380
2	✓		✓	750

Source: TEC, 2002.

APPENDIX B

**CURRENT AIR
CONSTRUCTION PERMIT**



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE:

Tampa Electric Company (TEC)
6944 U.S. Highway 41 North
Apollo Beach, Florida 33572-9200

File No.	PSD-FL-263 (PA92-32)
FID No.	1050233
SIC No.	4911
Expires:	December 31, 2002

Authorized Representative

Gregory M. Nelson, Manager, Environmental Planning

PROJECT AND LOCATION:

Permit pursuant to the requirements for the Prevention of Significant Deterioration of Air Quality (PSD Permit) for the construction of: two dual-fuel nominal 165 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators and two 114-foot stacks. The units will operate in simple cycle mode and intermittent duty. The units will be equipped with Dry Low NO_x (DLN-2.6) combustors and wet injection capability. They are designated by TEC as CTGs Nos. 2 and 3 and by the Department as ARMS Emissions Units 009 and 010.

The project will be located at the existing Polk Power Station, 9995 State Route 37 South, Mulberry, Polk County. UTM coordinates are: Zone 17; 402.45 km E; 3067.35 km N.

STATEMENT OF BASIS:

This PSD permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and 40CFR52.21. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached Appendices and Tables made a part of this permit:

Appendix BD
Appendix GC

BACT Determination
Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION I - FACILITY INFORMATION

FACILITY DESCRIPTION

This facility presently generates electric power from a 260 megawatt (MW) integrated coal gasification and combined cycle turbine unit. The primary mover is a General Electric MS 7001F combustion turbine capable of firing syngas or No. 2 fuel oil. Associated support facilities include: a solid fuel gasification system; a hydrogen sulfide to sulfur dioxide converter; a sulfuric acid plant; solid fuel handling and storage; and fuel oil handling and storage.

This permitting action is to install two dual-fuel nominal 165 megawatt (MW) General Electric PG7241FA combustion turbine-electrical generators with two 114-foot stacks. The project will utilize existing infrastructure including oil storage and auxiliary equipment.

Emissions from the new units will be controlled by Dry Low NO_x (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices will be employed to control all pollutants.

EMISSION UNITS

This permit addresses the following emission units:

ARMS EMISSIONS UNIT	SYSTEM	EMISSION UNIT DESCRIPTION
009 (CTG-2)	Power Generation	One nominal 165 Megawatt Gas Simple Cycle Combustion Turbine-Electrical Generator
010 (CTG-3)	Power Generation	One nominal 165 Megawatt Simple Cycle Gas Combustion Turbine-Electrical Generator

REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Pursuant to Table 62-212.400-2, modifications at this facility resulting in emissions increases greater than any of the following values require review per the PSD rules as well as a determination of Best Available Control Technology (BACT): 40 TPY of NO_x, SO₂, or VOC; 25/15 TPY of PM/PM₁₀; 100 TPY of CO; or 7 TPY of sulfuric acid mist (SAM).

This project is subject to certain requirements of Chapter 403, Part II, F.S., Electric Power Plant and Transmission Line Siting, including a modification of the Conditions of Certification (reference Site Certification PA92-32).

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION I - FACILITY INFORMATION

This facility and the project are also subject to applicable provisions of Title IV, Acid Rain, of the Clean Air Act..

PERMIT SCHEDULE

- xx/xx/99 Modification of Conditions of Certification Approved.
- 07/10/99 Notice of Intent to Issue PSD Permit published in the Lakeland Ledger.
- 06/30/99 Distributed Intent to Issue Permit.
- 06/10/99 Application deemed complete for PSD review.
- 02/08/99 Received revised PSD Application.

RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on February 8, 1999
- Department/ Siting Coordination Office incompleteness letter dated February 11, 1999
- Department/BAR memo to Siting Coordination Office dated March 9, 1999
- Comments and letter from the U. S. Fish and Wildlife Service dated March 19, 1999
- Site Certification and Revised PSD Application received May 10, 1999
- Department/BAR comments on Modeling dated May 20, 1999
- Comments from Hillsborough County EPC dated June 7, 1999
- Response from TEC/ECT received June 10, 1999
- Department's Intent to Issue PSD Permit and Public Notice Package dated June 30, 1999
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this Final Permit.
- Comments from TEC dated August 9, September 10, and 14, 1999.

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION II - ADMINISTRATIVE REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-0114. All documents related to reports, tests, and notifications should be submitted to the DEP Southwest District, 3804 Coconut Palm Drive, Tampa, Fl 33619-8218 and phone number 813/744-6100.
2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
5. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]
6. Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]
7. BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, or extension of the December 31, 2002 permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. In accordance with paragraph (4) of 40 CFR 52.21(j) the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction project, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION II - ADMINISTRATIVE REQUIREMENTS

the adequacy of any previous determination of best available control technology for the source.” [40 CFR 52.21(j)(4), Rule 62-4.070 F.A.C.]

8. Permit Extension: The permittee, for good cause, may request that this PSD permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.080, F.A.C.).
9. Application for Title IV Permit: An application for a Title IV Acid Rain Permit, must be submitted to the U.S. Environmental Protection Agency Region IV office in Atlanta, Georgia and a copy to the DEP's Bureau of Air Regulation in Tallahassee 24 months before the date on which a new unit begins serving an electrical generator greater than 25 MW. [40 CFR 72]
10. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy to the Department's Southwest District. [Chapter 62-213, F.A.C.]
11. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
12. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Southwest District by March 1st of each year.
13. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
14. Quarterly Reports: Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1998 version), shall be submitted to the DEP's Southwest District.

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

APPLICABLE STANDARDS AND REGULATIONS:

1. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-17, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 52, 60, 72, 73, and 75.
2. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]
3. These emission units shall comply with all applicable requirements of 40CFR60, Subpart A, General Provisions including:
 - 40CFR60.7, Notification and Recordkeeping
 - 40CFR60.8, Performance Tests
 - 40CFR60.11, Compliance with Standards and Maintenance Requirements
 - 40CFR60.12, Circumvention
 - 40CFR60.13, Monitoring Requirements
 - 40CFR60.19, General Notification and Reporting requirements
4. ARMS Emissions Unit 009. Direct Power Generation, consisting of a nominal 165 megawatt simple cycle combustion turbine-electrical generator, shall comply with all applicable provisions of 40CFR60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s).
5. ARMS Emissions Unit 010. Direct Power Generation, consisting of a nominal 165 megawatt simple cycle combustion turbine-electrical generator, shall comply with all applicable provisions of 40CFR60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s).
6. All notifications and reports required by the above specific conditions shall be submitted to the DEP's Southwest District.

GENERAL OPERATION REQUIREMENTS

7. Fuels: Only pipeline natural gas or maximum 0.05 percent sulfur fuel oil No. 2 or superior grade of distillate fuel oil shall be fired in this unit. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)] {Note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334}

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

8. Combustion Turbine Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to each unit at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,600 million Btu per hour (mmBtu/hr) when firing natural gas, nor 1,800 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.
10. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the DEP Southwest District as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
11. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
12. Circumvention: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
13. Maximum allowable hours of operation for each unit are 4,380 hours per year on natural gas and 750 hours per year on fuel oil. [Rule 62-210.200, F.A.C., (Definitions - Potential Emissions), 62-212.400, F.A.C., (BACT Determination)]

CONTROL TECHNOLOGY

14. Dry Low NO_x (DLN) combustors shall be installed on the stationary combustion turbine to comply with the NO_x emissions limits while firing natural gas. [Design, Rules 62-4.070 and 62-212.400, F.A.C. (BACT Determination)]
15. A water injection system shall be installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO_x emissions. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

16. The permittee shall design these units to accommodate adequate testing and sampling locations for compliance with the applicable emission limits (per each unit) listed in Specific Conditions No. 19 through 24. [Rule 62-4.070, Rule 62-204.800, F.A.C., and 40 CFR60.40a(b)]
17. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions consistent with normal operation and maintenance practices and shall be maintained to minimize NO_x emissions and CO emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas. [Rule 62-4.070, and 62-210.650, F.A.C.]

EMISSION LIMITS AND STANDARDS

18. Following is a summary of the emission limits and required technology. Values for NO_x are corrected to 15 % O₂ on a dry basis. These limits or their equivalent in terms of lb/hr or NSPS units, as well as the applicable averaging times, are followed by the applicable specific conditions [Rules 62-212.400, 62-204.800(7)(b) (Subpart GG), 62-210.200 (Definitions-Potential Emissions) F.A.C.]

POLLUTANT	CONTROL TECHNOLOGY	EMISSION LIMIT
PM/PM ₁₀ , VE	Pipeline Natural Gas Good Combustion	10 Percent Opacity (gas or oil)
VOC	As Above	1.4 ppmvw (Gas) 3.5 ppmvw (FO)
CO	As Above	12 ppmvd (Gas) 20 ppmvd (FO)
SO ₂ and Sulfuric Acid Mist	Pipeline Natural Gas Low Sulfur Oil	2 gr S/100 ft ³ 0.05% S Fuel Oil
NO _x	DLN, WI for F.O., limited fuel oil usage	10.5 ppmvd (DLN) 42 ppmvd (FO)

19. Nitrogen Oxides (NO_x) Emissions:

- While firing Natural Gas: The emission rate of NO_x in the exhaust gas shall not exceed 10.5 ppm @15% O₂ on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ shall not exceed 59 pounds per hour (at ISO conditions) and 9 ppmvd @15% O₂ to be demonstrated by the initial "new and clean" GE performance stack test. [Rule 62-212.400, F.A.C.]

Notwithstanding the applicable NO_x limit during normal operation, reasonable measures shall be implemented to maintain the concentration of NO_x in the exhaust gas at 9 ppmvd at 15% O₂ or lower. Any tuning of the combustors for Dry Low NO_x operation while firing gas shall result in initial subsequent NO_x concentrations of 9 ppmvd @15% O₂ or lower. [Rules 62-212.400 and 62-4.070, F.A.C.]

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

- While firing Fuel oil: The concentration of NO_x in the exhaust gas shall not exceed 42 ppmvd at 15% O₂ on the basis of a 3-hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ shall not exceed 319 lb/hr (at ISO conditions) and 42 ppmvd @15% O₂ to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]

The permittee shall develop a NO_x reduction plan when the hours of oil firing reach the allowable limit of 750 hours per year. This plan shall include a testing protocol designed to establish the maximum water injection rate and the lowest NO_x emissions possible without affecting the actual performance of the gas turbine. The testing protocol shall set a range of water injection rates and attempt to quantify the corresponding NO_x emissions for each rate and noting any problems with performance. Based on the test results, the plan shall recommend a new NO_x emissions limiting standard and shall be submitted to the Department's Bureau of Air Regulation and Compliance Authority for review. If the Department determines that a lower NO_x emissions standard is warranted for oil firing, this permit shall be revised. (BACT Determination).

20. Carbon Monoxide (CO) Emissions: During the first 12 months after initial start up, the concentration of CO in the stack exhaust gas shall exceed neither 15 ppmvd nor 48 lb/hr (at ISO conditions) while firing gas and neither 33 ppmvd nor 106 lb/hr (at ISO conditions) while firing oil based on stack test. Thereafter, these limits will be revised and lowered to 12 ppmvd and 38 lb/hr (at ISO conditions) while firing gas and 20 ppmvd and 65 lb/hr (at ISO conditions). The permittee shall demonstrate compliance with these limits by stack test using EPA Method 10. [Rule 62-212.400, F.A.C.]
21. Volatile Organic Compounds (VOC) Emissions: The concentration of VOC in the stack exhaust gas with the combustion turbine operating on natural gas shall exceed neither 1.4 ppmvw nor 2.8 lb/hr (ISO conditions) and neither 3.5 ppmvw nor 7 lb/hr (ISO conditions) while operating on oil to be demonstrated by initial stack test using EPA Method 18, 25 or 25A. [Applicant Request]
22. Sulfur Dioxide (SO₂) emissions: SO₂ emissions shall be limited by firing pipeline natural gas (sulfur content less than 2 grains per 100 standard cubic foot) or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur for 750 hours per year per unit. Emissions of SO₂ (at ISO conditions) shall not exceed 9.2 lb/hr (natural gas) and 98.1 lb/hr (fuel oil) as measured by applicable compliance methods described below. [40CFR60 Subpart GG and Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.]
23. Visible Emissions (VE): VE emissions shall serve as a surrogate for PM/PM10 emissions and shall not exceed 10 opacity. Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.]

EXCESS EMISSIONS

24. 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

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

period for other reasons unless specifically authorized by DEP for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open).

25. Excess emissions entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C. These emissions shall be included in the 24-hr average for NO_x.
26. Excess Emissions Report: If excess emissions occur due to malfunction (for greater than 2 hours in a 24-hr period), the owner or operator shall notify DEP's Southwest District within (1) working day 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 Department may request a written summary report of the incident. Following the NSPS format, 40 CFR 60.7 Subpart A, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition No. 18 and 19. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1998 version)].

COMPLIANCE DETERMINATION

27. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days of initial operation of the unit, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1998 version), and adopted by reference in Chapter 62-204.800, F.A.C.
28. Initial (I) performance tests (for both fuels) shall be performed on each unit while firing natural gas as well as while firing oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment such as change or tuning of combustors. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on each unit as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.
- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG and (I, A) short-term NO_x BACT limits (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirements).

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

- EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.
29. Continuous compliance with the NO_x emission limits: Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day. A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart. Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by 62-210.700 F.A.C. These excess emissions periods shall be reported as required in Conditions 25 and 26. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., 40 CFR 75 and BACT]
- All continuous monitoring systems (CEMS) shall be in continuous operation except for breakdowns, repairs, calibration checks, and zero and span adjustments. These CEMS shall meet minimum frequency of operation requirements: one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data average. [40CFR60.13]
30. Compliance with the SO₂ and PM/PM₁₀ emission limits: Notwithstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO₂ standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR60.335 or 40 CFR75 are used when determination of fuel sulfur content is made. 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 pursuant to 40 CFR 60.335(e) (1998 version).
31. Compliance with CO emission limit: An initial test for CO shall be conducted concurrently with the initial NO_x test, as required. The initial NO_x and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual RATA testing for the NO_x CEMS required pursuant to 40 CFR 75
32. Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit and periodic tuning data will be employed as surrogate and no annual testing is required.
33. Testing procedures: Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C.

34. Test Notification: The DEP's Southwest District shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance test(s).
35. Special Compliance Tests: The DEP may request a special compliance test pursuant to Rule 62-297.310(7), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.
36. Test Results: Compliance test results shall be submitted to the DEP's Southwest District no later than 45 days after completion of the last test run. [Rule 62-297.310(8), F.A.C.].

NOTIFICATION, REPORTING, AND RECORDKEEPING

37. Records: All measurements, records, and other data required to be maintained by TEC shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.
38. Compliance Test Reports: A test report indicating the results of the required compliance tests shall be filed as per Condition No.36 above. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

MONITORING REQUIREMENTS

39. Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from these units. Upon request from EPA or DEP, the CEMS emission rates for NO_x on these Units shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332. [Rules 62-204.800, 62-210.700, 62-4.130, 62-4.160(8), F.A.C., 40 CFR 75 and 40 CFR 60.7 (1998 version)].
40. 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

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263

SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

calculated and reported according to the requirements of 40 CFR 60.7(c)(3) and 40CFR 60.7(d)(2). Periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific Conditions No 18 and 19, 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).

41. CEMS in lieu of Water to Fuel Ratio: The NO_x 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 NO_x CEMS
42. Continuous Monitoring Certification and Quality Assurance Requirements: The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40CFR75. The monitoring plan, consisting of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62.
43. Natural Gas Monitoring Schedule: A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met:
 - The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
 - The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
 - Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO₂ emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

44. 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).

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-263
SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

45. Determination of Process Variables:

- The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value [Rule 62-297.310(5), F.A.C]

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- a) Determination of Best Available Control Technology (X)
 - b) Determination of Prevention of Significant Deterioration (X); and
 - c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.