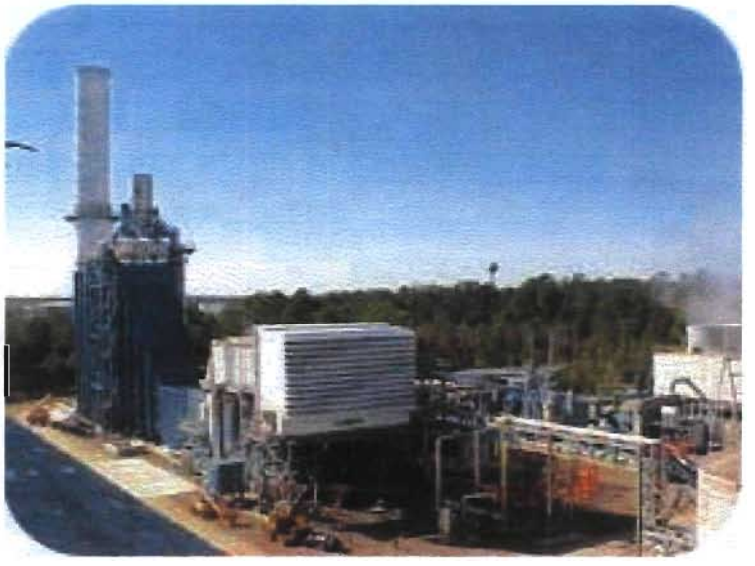
Application for Air Permit
Title V Source

Sam O. Purdom
Electric Generating Station



July 2002

City of Tallahassee
Your Own Utilities℠

Report Prepared By:
Utility Business and Customer Services
Environmental Resources

CITY OF TALLAHASSEE

300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
850/891-0010
TDD 1-800/955-8771
talgov.com

SCOTT MADDOX
Mayor
DEBBIE LIGHTSEY
Mayor Pro Tem

JOHN PAUL BAILEY
Commissioner
ALLAN J. KATZ
Commissioner
STEVE MEISBURG
Commissioner

ANITA R. FAVORS
City Manager
GARY HERNDON
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
SAM M. McCALL
City Auditor

July 1, 2002

HAND DELIVERED

Scott Sheplak
Professional Engineer Administrator
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

Re: Title V Permit Application – *Renewal*
Sam O. Purdom Generating Station (Facility I.D. 1290001)

Dear Mr. Sheplak:

Please find enclosed four (4) copies of an *Application for Air Permit – Title V Source* for the City of Tallahassee Sam O. Purdom Generating Station. The renewal application is submitted more than 180 days in advance of the expiration of current Operating Permit No. 1290001-003-AV, as required by Rule 62-4.090, Florida Administrative Code (F.A.C.).

The renewal application was completed on the form provided by the Florida Department of Environmental Protection and adopted in Rule 62-210.900(1), F.A.C. The renewal application is signed and sealed by a Licensed Professional Engineer and contains my original signature as the Primary Responsible Official.

If you have any questions regarding the attached application, please do not hesitate to contact either myself at (850) 891-5534 or Ms. Jennette Curtis, Director of Environmental Resources, at (850) 891-8850.

Sincerely,

Robert E. McGarrah
Manager of Power Production

Enclosures

cc: Jennette Curtis
Gordon King

Department of Environmental Protection

Division of Air Resource Management

RECEIVED
JUL 01 2002
BUREAU OF AIR REGULATION

RESPONSIBLE OFFICIAL NOTIFICATION FORM

Note: A responsible official is not necessarily a designated representative under the Acid Rain Program. To become a designated representative, submit a certificate of representation to the U.S. Environmental Protection Agency (EPA) in accordance with 40 CFR Part 72.24.

Identification of Facility

1. Facility Owner/Company Name: **City of Tallahassee**	
2. Site Name: **Sam O. Purdom Generating Station**	3. County: **Wakulla**
4. Title V Air Operation Permit/Project No. *(leave blank for initial Title V applications)*: **1290001-003-AV**	

Notification Type *(Check one or more)*

☐	**INITIAL:**	Notification of responsible officials for an initial Title V application.
■	**RENEWAL:**	Notification of responsible officials for a renewal Title V application.
■	**CHANGE:**	Notification of change in responsible official(s).
		Effective date of change in responsible official(s): **Upon Effective Date of Renewal Permit**

Primary Responsible Official

1. Name and Position Title of Responsible Official: **Robert E. McGarrah, Manager of Power Production**		
2. Responsible Official Mailing Address: Organization/Firm: **City of Tallahassee** Street Address: **2602 Jackson Bluff Road** City: **Tallahassee**	State: **Florida**	Zip Code: **32304**
3. Responsible Official Telephone Numbers: Telephone: **(850) 891 - 5534**	Fax: **(850) 891 – 5162**	

4. Responsible Official Qualification *(Check one or more of the following options, as applicable)*:

[ ] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

[ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

[X] The designated representative at an Acid Rain source.

5. Responsible Official Statement:

I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this notification. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I certify that I have authority over the decisions of all other responsible officials, if any, for purposes of Title V permitting.

Signature

6/27/02

Date

Additional Responsible Official

1. Name and Position Title of Responsible Official:

Gordon King, Plant Manager

2. Responsible Official Mailing Address:

Organization/Firm: **City of Tallahassee**

Street Address: **667 Port Leon Drive**

City: **St. Marks** State: **Florida** Zip Code: **32355**

3. Responsible Official Telephone Numbers:

Telephone: **(850) 891 - 5905** Fax: **(850) 891 - 5984**

4. Responsible Official Qualification *(Check one or more of the following options, as applicable)*:

[ ] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

[X] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

[ ] The designated representative at an Acid Rain source.

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **City of Tallahassee**	
2. Site Name: **Sam O. Purdom Generating Station**	
3. Facility Identification Number: **1290001**	[ ] Unknown
4. Facility Location: Street Address or Other Locator: **667 Port Leon Drive** City: **St. Marks** County: **Wakulla** Zip Code: **32355**	
5. Relocatable Facility? [ ] Yes [**X**] No	6. Existing Permitted Facility? [**X**] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **Jennette Curtis, Environmental Director**	
2. Application Contact Mailing Address: Organization/Firm: **City of Tallahassee, Environmental Resources** Street Address: **3rd Floor, 300 South Adams Street** City: **Tallahassee** State: **Florida** Zip Code: **32301**	
3. Application Contact Telephone Numbers: Telephone: **(850) 891-8850**	Fax: **(850) 891-8277**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	7/1/02
2. Permit Number:	1290001 - 007-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:_____

Operation permit number to be revised:_____

[ ] 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:_____

[**X**] 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: **1290001-003-AV**

Reason for revision: **Renewal with minor permit modifications**

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:
   Robert E. McGarrah, Manager of Power Production ***(as Responsible Official)***
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **City of Tallahassee**
   Street Address: **2602 Jackson Bluff Road**
   City: **Tallahassee** State: **Florida** Zip Code: **32304**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: **(850) 891-5534** Fax: **(850) 891-5162**
4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [X], 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.*

   Signature Date 6/27/07

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **Karl Bauer**
   Registration Number: **45808**
2. Professional Engineer Mailing Address:
   Organization/Firm: **City of Tallahassee**
   Street Address: **1125 Geddie Road**
   City: **Tallahassee** State: **Florida** Zip Code: **32304**
3. Professional Engineer Telephone Numbers:
   Telephone: **(850) 891-5859** Fax: **(850) 891-5829**

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 [**X**], 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 — Date: 6/28/02

(seal) 6/28/02

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
EU01	Unregulated Particulate Sources		N/A
EU02	Unregulated VOC Sources		
EU03	Combustion Turbine No. 1		N/A
EU04	Combustion Turbine No. 2		N/A
EU11	Boiler No. 7		N/A
EU12	Auxillary Boiler		N/A
EU13	Unit 8 Combustion Turbine		N/A

Application Processing Fee

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

Construction/Modification Information

1. Description of Proposed Project or Alterations: **N/A**
2. Projected or Actual Date of Commencement of Construction: **N/A**
3. Projected Date of Completion of Construction: **N/A**

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **16** East (km): **769.50** North (km): **3339.97**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): **30/09/47** Longitude (DD/MM/SS): **84/12/10**			
3. Governmental Facility Code: **4**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: **Jennette Curtis, Environmental Director**
2. Facility Contact Mailing Address: Organization/Firm: **City of Tallahassee** Street Address: **3rd Floor, 300 South Adams Street** City: **Tallahassee** State: **Florida** Zip Code: **32301**
3. Facility Contact Telephone Numbers: Telephone: **(850) 891-8850** Fax: **(850) 891-8277**

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source? [ ] Unknown
2. [**X**] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?
4. [**X**] Major Source of Hazardous Air Pollutants (HAPs)?
5. [ ] Synthetic Minor Source of HAPs?
6. [**X**] 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

The Florida Department of Environmental Protection Title V Core List (Effective: 3/01/02) is hereby incorporated by reference and made a part of this section. The following rules, however, are not applicable.

40 CFR 82 **Protection of Stratospheric Ozone**	**Rule 62-297.350, F.A.C.** **Determination of Process Variables (*Repealed*)**
40 CFR 82, Subpart B **Servicing of Motor Vehicle Air Conditioners (MVAC)**	**Rule 62-297.570, F.A.C.** **Test Report (*Repealed*)**
40 CFR 82, Subpart F **Recycling and Emissions Reduction**	**Rule 62-297.400, F.A.C.** **Agricultural and Silviculture Fires**
Rule 62-210.400, F.A.C. **Emission Estimates (*Repealed*)**	**Rule 62-256.450, F.A.C.** **Burning for Cold or Frost Protection**
Rule 62-297.330, F.A.C. **Applicable Test Procedures (*Repealed*)**	
Rule 62-297.340, F.A.C. **Frequency of Compliance Tests (*Repealed*)**	
Rule 62-297.345, F.A.C. **Stack Sampling Facilities Provided by the Owner of an Emissions Unit (*Repealed*)**	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	3. Requested Emissions Cap tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
CO	**A**				
NOx	**A**		**467**	**ESCPSD**	
PM_{10}	**SM**				
SO_2	**SM**		**80**	**ESCPSD**	

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [**X**] Attached, Document ID: **PGS-01** [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [**X**] Attached, Document ID: **PGS-02** [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [**X**] Attached, Document ID: **PGS-03** [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [**X**] Attached, Document ID: **PGS-04** [ ] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [**X**] Attached, Document ID: **PGS-05** [ ] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID:_____ [**X**] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [**X**] Attached, Document ID: **PGS-06** [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [**X**] Equipment/Activities On site but Not Required to be Individually Listed
   [ ] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____ [**X**] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Identification of Additional Applicable Requirements:
    [ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Risk Management Plan Verification:
    [ ] 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:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [**X**] Not Applicable

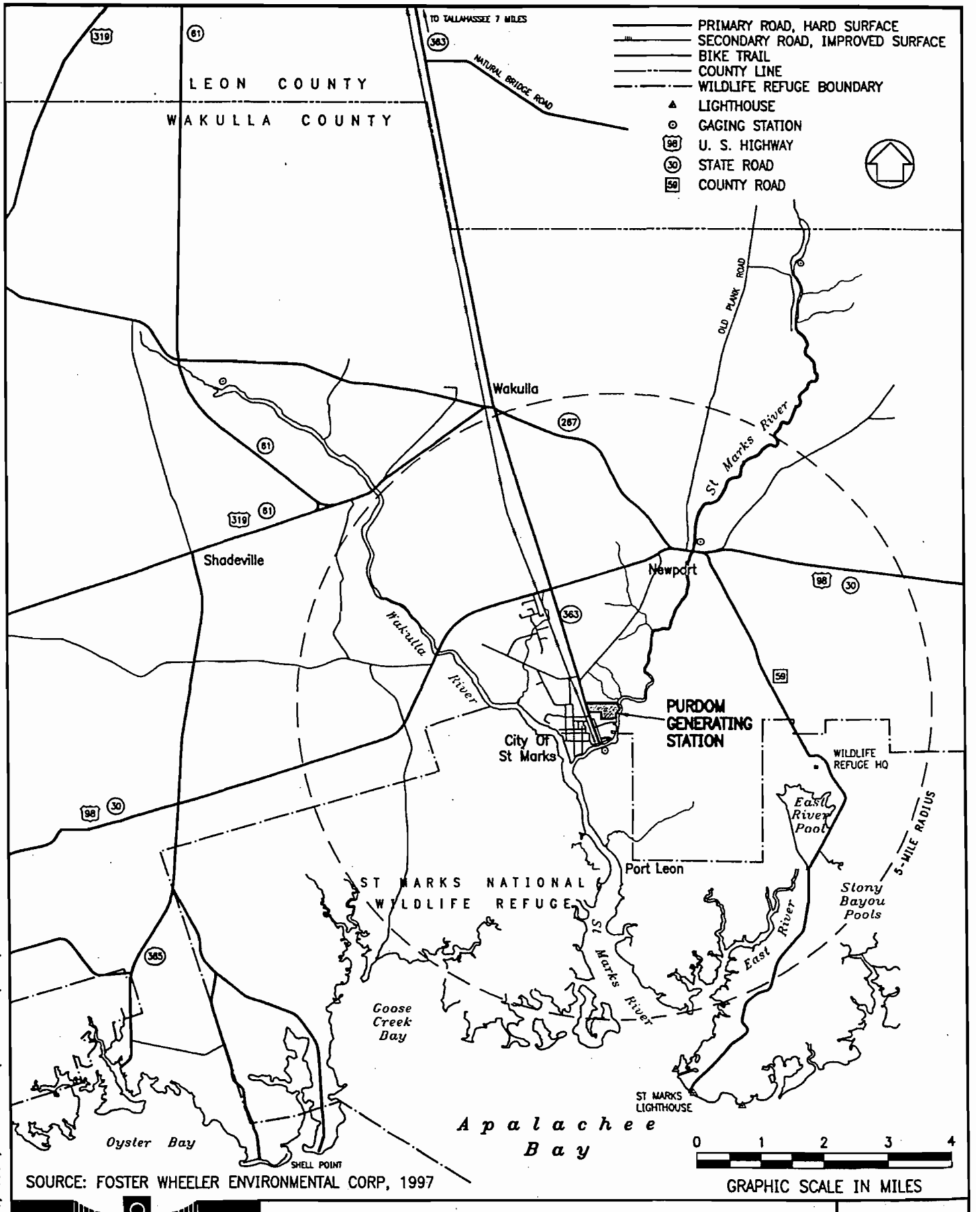
14. Compliance Report and Plan:
    [**X**] Attached, Document ID: **PGS-07** [ ] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [**X**] Attached, Document ID: **PGS-08** [ ] Not Applicable

ATTACHMENT PGS-01

FACILITY LOCATION MAP

Sam O. Purdom Generating Station
July 1, 2002



SOURCE: FOSTER WHEELER ENVIRONMENTAL CORP, 1997

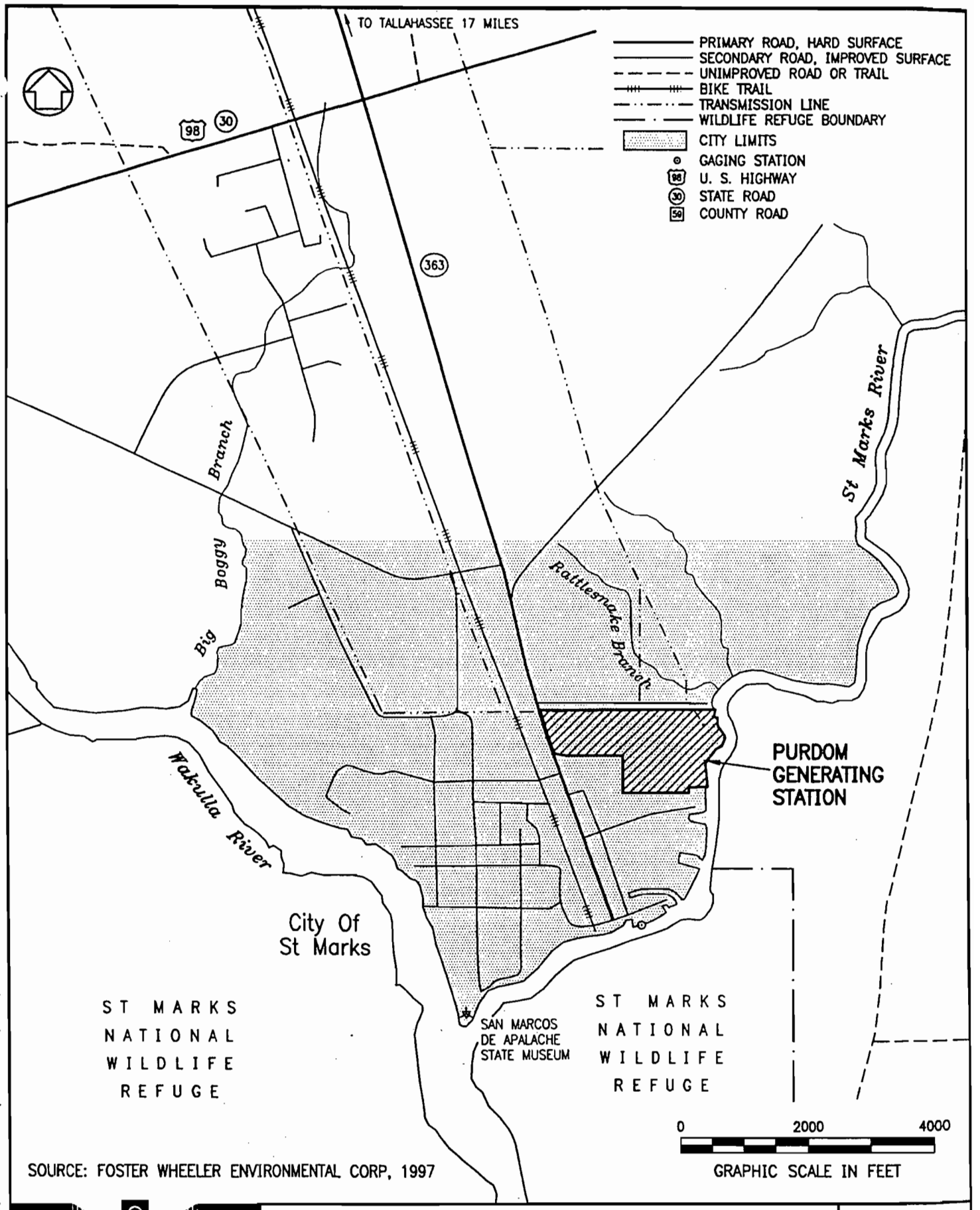
CITY OF TALLAHASSEE

SITE LOCATION MAP

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 1-1

PLOT DATE MAR 1, 1997 C:\15840002\----\00000-36.DWG



CITY OF TALLAHASSEE

SITE LOCATION

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

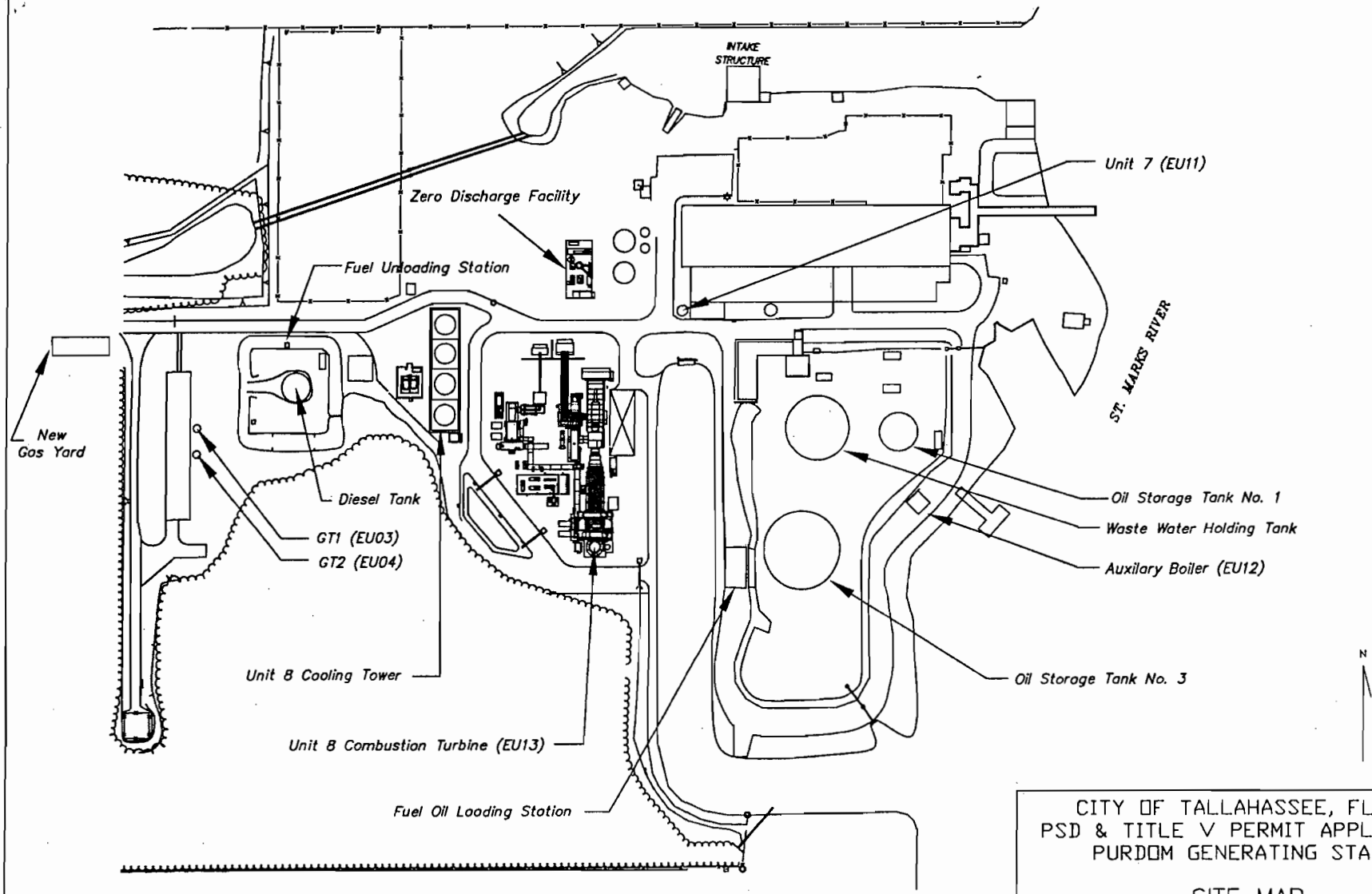
Figure 1-2

PLOT DATE MAR 1, . . ,6 C:\15840007\----\00000-34.DWG

ATTACHMENT PGS-02

SITE PLAN

Sam O. Purdom Generating Station
July 1, 2002



CITY OF TALLAHASSEE, FLORIDA
PSD & TITLE V PERMIT APPLICATIONS
PURDOM GENERATING STATION

SITE MAP

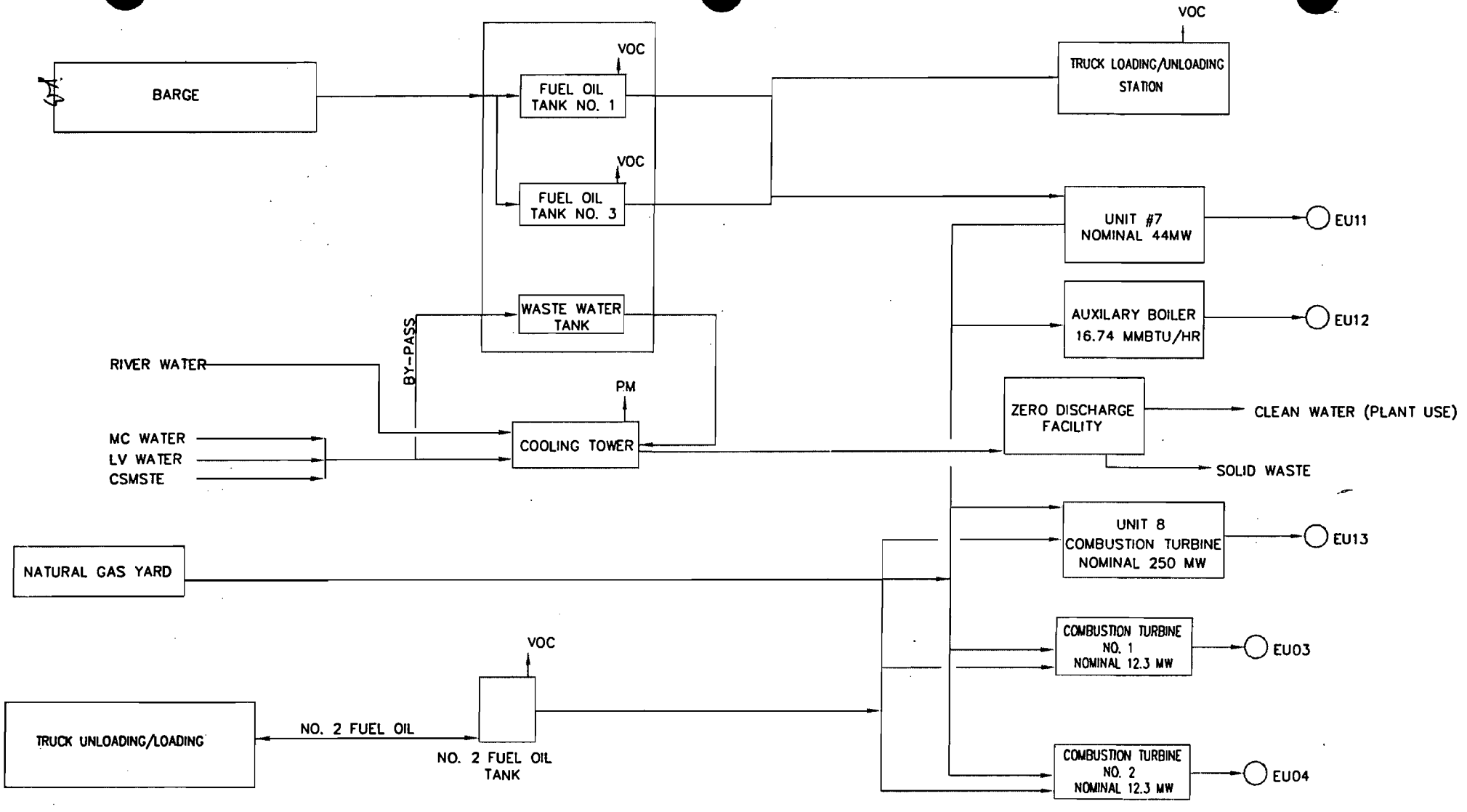
FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: 1" = 225' DATE: 2/26/97	BY: DJG CKD' BY: DF REV. BY: DJG	FILE NO: SITEPLAN.DWG FIGURE NO. PGS-02

ATTACHMENT PGS-03

PROCESS FLOW DIAGRAM

Sam O. Purdom Generating Station
July 1, 2002



LV WATER – LOW VOLUME DISCHARGE WATER

MC WATER – METAL CLEANING DISCHARGE WATER

CSMSTE – CITY OF ST. MARKS SEWAGE TREATMENT EFFLUENT

CITY OF TALLAHASSEE, FLORIDA
PSD & TITLE V PERMIT APPLICATIONS
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
PURDOM GENERATING STATION

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 2/27/97	BY: DJG CKD BY: DF	CAD FILE NO. PPFD.DWG
		FIGURE NO.

ATTACHMENT PGS-04

REASONABLE PRECAUTIONS

Reasonable Precautions

As part of the Title V application development, the City of Tallahassee reviewed the potential sources of unconfined particulate emissions at its Purdom Generating Station. The intent of the review was to ensure that reasonable precautions were in place to prevent and/or control these potential particulate emissions. The potential sources which were identified included the following:

1. Concrete mixing;
2. Abrasive blasting
3. Aggregate handling and storage;
4. Heavy construction activities;
5. Driving on paved/unpaved roads; and
6. Spray application of surface coatings.

Based on the City of Tallahassee's review of these potential sources, the following reasonable precautions have been established to control unconfined emissions of particulate matter:

- The portable concrete mixer is operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever practical.

- The abrasive blasting activities are associated with normal maintenance and corrosion control activities. These activities are also enclosed wherever practical.

- The aggregate storage piles occur on a temporary basis and are associated with miscellaneous construction activities. Water is applied on an as-needed basis to control unconfined emissions from the handling and storage of aggregate materials and the related construction activities.

- Unconfined emissions associated with the limited on-site traffic are controlled through limiting vehicle speeds and unnecessary traffic within the plant grounds.

- The spray applications of surface coatings are associated with normal maintenance and corrosion activities. These activities are enclosed whenever practical.

ATTACHMENT PGS-05

FUGITIVE EMMISSIONS IDENTIFICATION

Fugitive Emissions Identification

Fugitive emissions resulting from the operation of the Purdom Generating Station are addressed in Attachment PGS-06 (Insignificant Activities) of this renewal application.

Fugitive emissions that exceed the emissions threshold amount set forth in Section III(F) of this renewal application have been assigned an Emissions Unit Identification Number. An Emissions Unit Information Section has been completed for these units.

ATTACHMENT PGS-06

INSIGNIFICANT ACTIVITIES

Insignificant Activities

In developing the Title V renewal application the City of Tallahassee conducted an emissions unit inventory of the Purdom Generating Station. The attached inventory represents a comprehensive examination of the facility, its operations, and potential emissions units. The inventory identified fifteen (15) emissions unit areas. These areas include the following:

1. Combustion Turbine Operations
2. Steam Generator (Boiler) Operations
3. Emergency Generator
4. Fuel Farm (Organic Liquid Storage)
5. Fuel Dispensing Operations
6. Space Heating
7. Evaporative Loss Sources
8. Cooling Towers
9. Water Treatment
10. Laboratory
11. Central Vacuum System
12. Maintenance Activities
13. Plant Operations
14. Fugitive Dust
15. Gasoline Engines

The inventory attempted to identify every emissions unit at the facility. The attached inventory provides descriptions of each emissions unit noted at the facility and lists its regulatory classification. The regulatory classifications encompass the following four (4) general categories:

- Regulated (with or without emissions limitations)
- Unregulated
- Proposed to be insignificant under criteria listed in Rule 62-213.430(6), F.A.C
- Trivial – per FDEP guidance (all trivial emissions units and activities have been omitted from the inventory list per FDEP guidance dated March 1, 2000).

The Title V renewal application includes all regulated emissions units, and the unregulated fugitive dust and VOC sources. The regulated emissions units have specific emissions limitations. The fugitive dust and VOC sources are considered unregulated emissions units with no specific emission limited pollutants.

The list of emissions units also includes those which meet the insignificant criteria of Rule 62-213.430(6), F.A.C. The emissions units includes the following:

- Fugitive Dust – Exemption is requested for the heavy construction activities listed under this category. Emissions from these activities are of the Fugitive Areas type generated by the operation of heavy equipment on site. The request is based on the fugitive nature of the emissions and the low quantities associated with these activities.

- Evaporative Loss Sources – Exemption is requested for surface coating operations at the facility based on the fugitive nature of the emissions and low quantities of surface coating material. Surface coating activities have been included in the Title V application within EU-02.

CITY OF TALLAHASSEE
EMISSIONS UNIT INVENTORY
SOURCE - PURDOM GENERATING STATION

Activity No.	Emission Unit	Emission Unit Description	Regulatory [1] Classification
1	CT #1	Combustion Turbine - 228 mmBtu/hr	Regulated - Permit # 1290001-003-AV
1a	Oil Vapor Extractor	Oil Vapor Extractor	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
1b	Fuel Oil Piping	Fuel Oil Piping	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
1c	Lube Oil Tank	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
2	CT #2	Combustion Turbine - 228 mmBtu/hr	Regulated - Permit # 1290001-003-AV
2a	Oil Vapor Extractor	Oil Vapor Extractor	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
2b	Fuel Oil Piping	Fuel Oil Piping	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
2c	Lube Oil Tank	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5	Steam Generator No. 7	Steam Generator - 621 mmBtu/hr	Regulated - Permit # 1290001-003-AV
5a	Fuel Oil Piping	Fuel Oil Piping	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5b	Hydrogen Gas Vents	Hydrogen Gas Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5c	Deareator Tank Vents	Deareator Tank Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5d	Oil Vapor Extractors	Oil Vapor Extractors	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5e	Lube Oil Tank (storage)	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5f	Lube/Fuel Oil Drip Pans	Lube/Fuel Oil Drip Pans	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5g	Noncondensable Gas	Noncondensable Gas Extractor	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5h	Nat Bas Blowdown/Vent	Nat Gas Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
5i	CO2 Vent Purge	CO2 Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
6	Emergency Generator	Diesel Engine <400 hrs/yr	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
6a	Diesel Driven Fire Pump	Diesel Engine <400 hrs/yr	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
7	Fuel Farm	Fuel Oil Tank No. 1	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
7a	Fuel Farm	Fuel Oil Tank No.3	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
7b	Fuel Farm	Waste Water Tank	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
7d	Fuel Farm	Waste Oil Tank	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
8	No. 2 Fuel Oil Tank	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
8a	Diesel Tank (300 gallons)	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
8b	Truck Loading/Unloading	Fuel Dispensing Operation	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
9	Gasoline Tank	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
9a	Fuel Dispensing Operation	Fuel Dispensing Operation	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
10	Diesel Tank	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
10a	Fuel Dispensing Operation	Fuel Dispensing Operation	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
11	Barge Unloading Station	Fuel Dispensing Operation	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)

CITY OF TALLAHASSEE
EMISSIONS UNIT INVENTORY
SOURCE - PURDOM GENERATING STATION

Activity No.	Emission Unit	Emission Unit Description	Regulatory [1] Classification
12	Fuel Dispensing Operation	Truck Loading/Unloading Rack 1	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
12a	Fuel Dispensing Operation	Truck Loading/Unloading Rack 2	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13a	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13b	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13c	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13d	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13e	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13f	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13g	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13h	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13i	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13j	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13k	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13l	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13m	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
13n	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14a	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14b	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14c	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14d	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14e	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
14f	Space Heater	Space Heater	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
15	Fugitive Dust	Paved Roads	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
15a	Fugitive Dust	Unpaved Roads	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
15b	Fugitive Dust	Heavy Construction Activities	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
15d	Fugitive Dust	Aggregate Handling & Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
17	Laboratory	Laboratory Equipment	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
17a	Laboratory	Chemical Usage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
17b	Laboratory	Vacuum Pumps	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
17c	Laboratory	Laboratory Fume Hoods	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
18	Central Vacuum System	Central Vacuum System	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)

CITY OF TALLAHASSEE
EMISSIONS UNIT INVENTORY
SOURCE - PURDOM GENERATING STATION

Activity No.	Emission Unit	Emission Unit Description	Regulatory [1] Classification
19	Maintenance Activities	Welding	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
19a	Maintenance Activities	High Temperature Metal Cutting	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20	Plant Operations	Lube Oil Storage Tanks	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20a	Plant Operations	Surface Coating Operations	Unregulated
20c	Plant Operations	Propane Storage Tanks	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20d	Plant Operations	Sulfuric Acid Tank Vent	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20e	Plant Operations	Sodium Hydroxide Tank Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20f	Plant Operations	Demineralizer Degasifier	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20g	Plant Operations	G/C Natural Gas Vent	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
20h	Plant Operations	Natural Gas Blowdown	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
21	Auxiliary Boiler	Steam Generator - 16.74 mmBtu/hr	Regulated - Permit # 1290001-003-AV
21a	Hydrogen Gas Vents	Hydrogen Gas Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
21b	Deareator Tank Vents	Deareator Tank Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
21c	Noncondensable Gas	Noncondensable Gas Extractor	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22	Unit 8	Combustion Turbine	Regulated - Permit # 1290001-003-AV
22a	Unit 8	Oil Vapor Extractor	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22b	Unit 8	Fuel Oil Piping	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22c	Unit 8	Organic Liquid Storage	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22d	Unit 8	Heat Recovery Steam Generator	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22e	Unit 8	Hydrogen Gas Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22f	Unit 8	Deareator Tank Vents	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22g	Unit 8	Lube/Fuel Oil Drip Pans	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22h	Unit 8	Noncondensable Gas Extractor	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22i	Unit 8	Natural Gas Blowdown/Vent	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
22j	Unit 8	CO2 Vent Purge	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
23	Water Treatment	Zero Discharge Facility	Unregulated - propose insignificant under criteria in Rule 62-213.430(6)
23a	Water Treatment	Cooling Tower	Unregulated

[1]Note: All trivial emissions units and activities are omitted per FDEP 3/1/00 guidance memo. In addition, all mobil sources are omitted as outside the scope of Title V stationary source permitting.

ATTACHMENT PGS-07

COMPLIANCE REPORT AND PLAN

Sam O. Purdom Generating Station
July 1, 2002

Compliance Report and Plan

The List of Applicable Regulations contained in the Emissions Unit Information Section of each regulated emissions unit identifies the requirements which are applicable to each of these units that comprise this Title V source. Each emissions unit is in compliance with the respective applicable requirements identified in this renewal application as of the date of application submittal and the facility-wide cap requirements contained in Permit No. 1290001-003-AV.

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), F.A.C., once the Title V permit is issued and effective.

ATTACHMENT PGS-08

COMPLIANCE CERTIFICATION

Compliance Certification

In accordance with the instructions for the Florida Department of Environmental Protection's Form No. 62-210.900(1), F.A.C., and Rule 62-213.420(3)(k), F.A.C., a compliance statement must be included in each application for an air pollution permit. This Compliance Certification is intended to meet the requirements of the instructions and the regulation.

Certification Statement

I, the undersigned, am a 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 and information in this application are true, accurate and complete.

Robert E. McGarrah
Manager of Power Production

6/27/02
Date

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

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

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Unregulated PM Units and Activities

4. Emissions Unit Identification Number:
[X] No ID ID: [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

This emissions unit includes the unregulated particular matter unit (Unit 8 cooling tower) and activities which emit or have the potential to emit more than five tons per year. The emissions unit does not include trivial or insignificant units or activities.

Emissions Unit Information Section 1 of 7

Emissions Unit Control Equipment

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

   Cooling Tower – Drift Eliminators

2. Control Device or Method Code(s): **015**

Emissions Unit Details

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

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

3. Incinerator Information: **N/A**

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: **N/A**	
2. Maximum Incineration Rate: **N/A**	
3. Maximum Process or Throughput Rate: **N/A**	
4. Maximum Production Rate: **N/A**	
5. Requested Maximum Operating Schedule: **N/A**	
hours/day	days/week
weeks/year	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): **N/A**	

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

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? **N/A**	2. Emission Point Type Code: **N/A**	
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: **N/A**	6. Stack Height: **N/A**	7. Exit Diameter: **N/A**
8. Exit Temperature: **N/A**	9. Actual Volumetric Flow Rate: **N/A**	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**	
13. Emission Point UTM Coordinates: **N/A**		
14. Emission Point Comment (limit to 200 characters): **N/A**		

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
Cooling Tower (Fresh Water)		
2. Source Classification Code (SCC):	3. SCC Units:	
2820000000	**kGals**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
62	**543,120**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
N/A	**N/A**	**N/A**
10. Segment Comment (limit to 200 characters):		
Emissions from the cooling tower are associated with drift losses. Drift loss emission includes particulate matter and is a direct result of the dissolved solids contained within the cooling tower water. Drift eliminators have been installed as a Best Available Control Technology for the cooling tower.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**015**		**NS**

KB

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **N/A**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **N/A** lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **N/A**
8. Calculation of Emissions (limit to 600 characters): **N/A**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **N/A**	

Allowable Emissions

1. Basis for Allowable Emissions Code: **N/A**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **N/A**
5. Method of Compliance (limit to 60 characters): **N/A**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **N/A**	

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

Visible Emissions Limitation:

1. Visible Emissions Subtype: **N/A**	2. Basis for Allowable Opacity: **N/A** [ ] Rule [ ] Other
3. Requested Allowable Opacity: **N/A** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment (limit to 200 characters): **N/A**	

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

Continuous Monitoring System:

1. Parameter Code: **N/A**	2. Pollutant(s): **N/A**
3. CMS Requirement: **N/A**	[ ] Rule [ ] Other
4. Monitor Information: **N/A** Manufacturer: Model Number: Serial Number:	
5. Installation Date: **N/A**	6. Performance Specification Test Date: **N/A**
7. Continuous Monitor Comment (limit to 200 characters): **N/A**	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [**X**] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable
10. Supplemental Requirements Comment: **N/A**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

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

[**X**] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Unregulated Surface Coating

4. Emissions Unit Identification Number:
[ ] No ID ID: **010** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

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

   N/A

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

Emissions Unit Details

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

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

3. Incinerator Information: **N/A**

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: **N/A**	mmBtu/hr		
2. Maximum Incineration Rate: **N/A**	lb/hr		tons/day
3. Maximum Process or Throughput Rate: **N/A**			
4. Maximum Production Rate: **N/A**			
5. Requested Maximum Operating Schedule: **N/A**			
	hours/day		days/week
	weeks/year		hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): **N/A**			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

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? **N/A**	2. Emission Point Type Code: **N/A**	
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: **N/A**	6. Stack Height: **N/A**	7. Exit Diameter: **N/A**
8. Exit Temperature: **N/A**	9. Actual Volumetric Flow Rate: **N/A**	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**	
13. Emission Point UTM Coordinates: **N/A**		
14. Emission Point Comment (limit to 200 characters): **N/A**		

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
Surface Coating – Normal Operations		
2. Source Classification Code (SCC): **2401001000***	3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **N/A**	6. Estimated Annual Activity Factor: **5000**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment (limit to 200 characters): **Annual Activity Factor is based on maximum surface area coated.** ***Other codes may also apply**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
VOC			**NS**
HAPS			**NS**
H120			**NS**
H169			**NS**
H186			**NS**
H123			**NS**
H085			**NS**

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **N/A**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **N/A** lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **N/A**
8. Calculation of Emissions (limit to 600 characters): **N/A**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions

1. Basis for Allowable Emissions Code: **N/A**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year
5. Method of Compliance (limit to 60 characters): **N/A**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **N/A**	

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

Visible Emissions Limitation:

1. Visible Emissions Subtype: **N/A**	2. Basis for Allowable Opacity: **N/A** [ ] Rule [ ] Other
3. Requested Allowable Opacity: **N/A** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment (limit to 200 characters): **N/A**	

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

Continuous Monitoring System:

1. Parameter Code: **N/A**	2. Pollutant(s): **N/A**
3. CMS Requirement: **N/A**	[ ] Rule [ ] Other
4. Monitor Information: **N/A** Manufacturer: Model Number: Serial Number:	
5. Installation Date: **N/A**	6. Performance Specification Test Date: **N/A**
7. Continuous Monitor Comment (limit to 200 characters): **N/A**	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [**X**] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Combustion Turbine No. 1

4. Emissions Unit Identification Number:
[ ] No ID ID: **008** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**≈ 1963**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters):

The maximum allowable operating rate is 228 mmBtu/hr (lower heating value) at an ambient temperature of 80 degrees Fahrenheit when firing fuel oil or natural gas. The maximum hours of operating are not limited, but the units are subject to the NOx and SO_2 facility wide emissions caps.

Emissions Unit Control Equipment

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

Fuel Quality

Pursuant to Specific Condition D.6. of current Operating Permit No. 1290001-003-AV, the City of Tallahassee is authorized to fire natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight.

2. Control Device or Method Code(s):

Use of Fuel with Low Sulfur Content – No Code

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Westinghouse**
   Model Number: **W171G**
2. Generator Nameplate Rating: **12.3** MW (nominal)
3. Incinerator Information: **N/A**

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: **228** mmBtu/hr			
2. Maximum Incineration Rate:	**N/A**	lb/hr	tons/day
3. Maximum Process or Throughput Rate: **N/A**			
4. Maximum Production Rate: **N/A**			
5. Requested Maximum Operating Schedule:			
	24 hours/day		**52** days/week
	52 weeks/year		**8,760** hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):			
The maximum heat input rate reflects operation at an ambient temperature of 80° Fahrenheit based on the lower heating value of the fuels. All values herein are based on the value contained in Field 1 above.			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Rule 62-210.700(1),(4),(6) F.A.C.	
Rule 62-296.320(4)(b) F.A.C.	
Rule 62-297.310(2) F.A.C.	
Rule 62-297.310(4)(a)(2) (except a-c) F.A.C.	
Rule 62-297.310(7)(a)3,4a,8,9 F.A.C.	
Rule 62-297.310(8) F.A.C.	
40 CFR 72.6(b)(1)	
40 CFR 63.50 – 63.55	

VA7

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? **EU-03**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **The emission point represents the exhaust for Combustion Turbine No. 1**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **38** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **880** °F	9. Actual Volumetric Flow Rate: **395,080** acfm	10. Water Vapor: **N/A** %
11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**	
13. Emission Point UTM Coordinates: Zone: **16** East (km): **769.421** North (km): **3339.825**		
14. Emission Point Comment (limit to 200 characters): **Value in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

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

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Natural Gas**		
2. Source Classification Code (SCC): **20100201**	3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.245**	5. Maximum Annual Rate: **2143**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: *	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **932 (LHV)**
10. Segment Comment (limit to 200 characters): ***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.** **The value in Field 9 is an estimate subject to fluctuation.**		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Number 2 (0.05% Sulfur) Fuel Oil**		
2. Source Classification Code (SCC): **20100101**	3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **1,740**	5. Maximum Annual Rate: **1.52×10^7**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **0.05%**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **0.131 (LHV)**
10. Segment Comment (limit to 200 characters): **The value in Field 9 is an estimate and subject to fluctuation.** **Fuel additives typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin may be used.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
NOx			EL
PM			NS
PM_{10}			NS
SO_2			EL
VOC			NS
H106			NS
H107			NS
H133			NS
HAPS			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **11.7** lb/hour **CAP** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **0**

8. Calculation of Emissions (limit to 600 characters):

Fuel Oil Sulfur Content: 0.05% (wt)
Fuel Oil Usage Rate: 1,740 gal / hr
MW SO_2: 64
MW S: 32

lb/hr = (1,740 gal/hr) x (7.05 lb/gal) x (0.05/100) x (64/32) x (95/100) = 11.7 lb/hr

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Potential emission rate reflects firing Number 2 (0.05% Sulfur) diesel fuel oil with 95 percent conversion of the sulfur to SO_2. Combustion Turbine No. 1 is part of the requested facility-wide SO_2 and NOx caps.

Allowable Emissions

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **0.05% sulfur (wt) and 80 TPY cap for the facility**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year
5. Method of Compliance (limit to 60 characters): **Compliance will be based on unit fuel usage data, fuel density, and vendor fuel data.**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Annual emissions will be based on actual sulfur content of the natural gas and Number 2 (0.05% Sulfur) diesel fuel oil.**	

Potential/Fugitive Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **N/A**	
3. Potential Emissions: **159.1** lb/hour **CAP** tons/year		4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: **N/A** Reference:		7. Emissions Method Code: **3**

8. Calculation of Emissions (limit to 600 characters):

Maximum Firing Rate: 228 mmBtu/hr
Emission Factor: 0.698 lb/mmBtu

lb/hr = (228 mmBtu/hr) x (0.698 lb-Nox/mmBtu) = 159.1 lb/hr

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Future potential annual emissions is part of the requested facility-wide cap on NOx emissions.

Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
ESCPSD	**N/A**
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year
467 TPY cap for the facility	

5. Method of Compliance (limit to 60 characters):

Compliance will be based on unit specific fuel usage logs, AP-42 emission factors, and vendor fuel data

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

Annual emissions will be based on the AP-42 emission factors [0.44 lb/mmBtu – natural gas and 0.698 lb/mmBtu – No. 2 diesel fuel oil].

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

Visible Emissions Limitation:

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **< 20%** Exceptional Conditions: **100 %** Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9 in any fiscal year in which the turbine operates greater than 400 hours.**	
5. Visible Emissions Comment (limit to 200 characters): **In accordance with Rule 62-210.700(1) F.A.C., excess emissions resulting from startup, shutdown, or malfunction are permitted providing that the duration of excess emissions be minimized but in no case to exceed two hours in any 24 hour period unless authorized by the Department for longer duration.**	

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

Continuous Monitoring System:

1. Parameter Code: **N/A**	2. Pollutant(s): **N/A**
3. CMS Requirement: **N/A**	[ ] Rule [ ] Other
4. Monitor Information: **N/A** Manufacturer: Model Number: Serial Number:	
5. Installation Date: **N/A**	6. Performance Specification Test Date: **N/A**
7. Continuous Monitor Comment (limit to 200 characters): **N/A**	

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

Supplemental Requirements

1. Process Flow Diagram [**X**] Attached, Document ID: **EU03-01** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU03-02** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [**X**] Attached, Document ID: **EU03-03** [ ] Previously submitted, Date: [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU03-04** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU03-05** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU03-06** [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

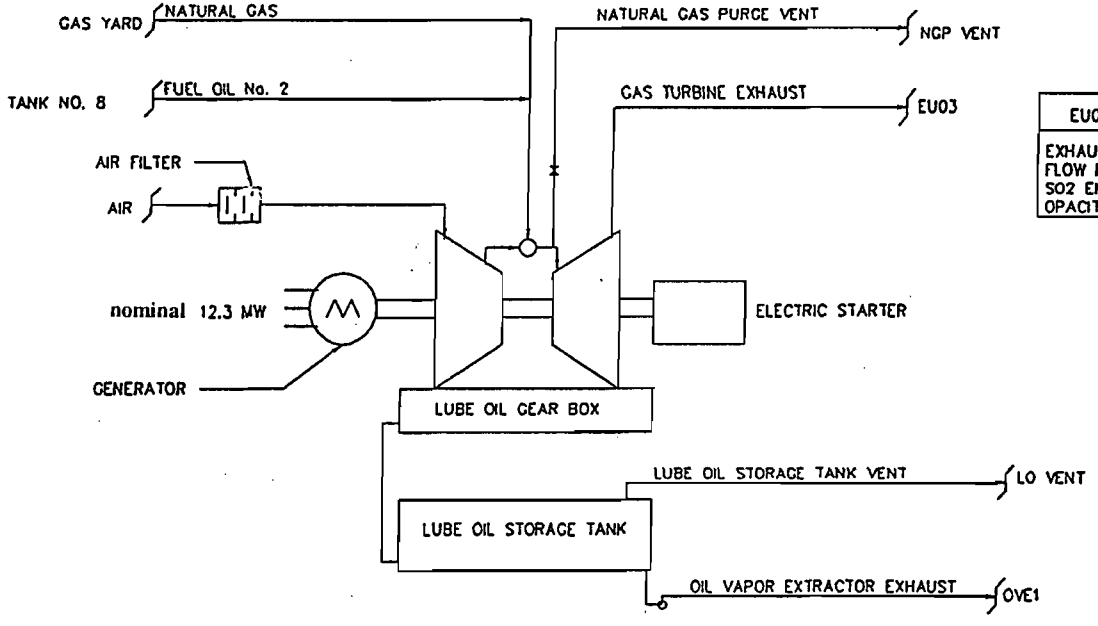
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT EU03-01

PROCESS FLOW DIAGRAM

Sam O. Purdom Generating Station
July 1, 2002



EU03 – EXHAUST PARAMETERS
EXHAUST TEMP. -880 F FLOW RATE – 395,080 ACFM SO2 EMISSIONS – 97.4 LBS/HR OPACITY– <20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 2 FUEL OIL
HEAT RATE (MMBTU/HR)	228	228
FEED RATE (MMCF/HR)	0.228	N/A
FEED RATE (KGAL/HR)	N/A	1.73
FEED RATE (LB/HR)	N/A	12,175

CITY OF TALLAHASSEE, FLORIDA
TITLE V PERMIT APPLICATION
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBUSTION TURBINE NO. 1

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE 3/15/95	BY: DJC CK'D' BY: DF REV. BY: CJT	CAD FILE NO. PGT1.DWG FIGURE NO. EU03-02

ATTACHMENT EU03-02

FUEL ANALYSIS OR SPECIFICATION

Sam O. Purdom Generating Station
July 1, 2002

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU03, Combustion Turbine No.1. Maximum values could be higher. The fuels represented by the analyses include clean pipeline quality natural gas and No. 2 (0.05% Sulfur) diesel fuel oil.

FGT
Last Updated 5/28/02 7:56

Station Name	Total Sulfur Previous Day Avg ppm 05/26/02	Total Sulfur Previous Day Avg Grains/hcf 05/26/02
Perry 36" Stream #1	2.1	0.132
Perry 30" Stream #2	2.9	0.184
Perry 24" Stream #3	3.3	0.206
Brooker 24" Stream	3.0	0.187

Florida Gas makes no warranty or representation whatsoever as to the accuracy of th
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30 Stream #: Avg Grains/
05/25/02	33	2.128	0.133	3.668	0.229
05/24/02	32	2.366	0.148	4.319	0.270
05/23/02	31	3.001	0.188	4.979	0.311
05/22/02	30	3.906	0.244	4.767	0.298
05/21/02	29	4.803	0.300	4.542	0.284
05/20/02	28	3.510	0.219	4.099	0.256
05/19/02	27	3.311	0.207	3.865	0.242
05/18/02	26	3.893	0.243	5.044	0.315
05/17/02	25	2.135	0.133	2.128	0.133
05/16/02	24	1.986	0.124	1.757	0.110
05/15/02	23	2.757	0.172	2.019	0.126
05/14/02	22	2.210	0.138	1.694	0.106
05/13/02	21	1.901	0.119	1.844	0.115
05/12/02	20	1.827	0.114	1.536	0.096
05/11/02	19	1.820	0.114	1.292	0.081
05/10/02	18	1.848	0.115	1.409	0.088
05/09/02	17	1.656	0.104	1.365	0.085
05/08/02	16	1.871	0.117	1.570	0.098
05/07/02	15	2.676	0.167	2.158	0.135
05/06/02	14	2.819	0.176	2.233	0.140
05/05/02	13	2.428	0.152	1.901	0.119
05/04/02	12	3.045	0.190	2.126	0.133
05/03/02	11	2.941	0.184	2.316	0.145
05/02/02	10	2.381	0.149	2.045	0.128
05/01/02	9	1.863	0.116	1.625	0.102
04/30/02	8	1.648	0.103	1.374	0.086
04/29/02	7	1.746	0.109	1.343	0.084
04/28/02	6	1.709	0.107	1.387	0.087
04/27/02	5	1.640	0.103	1.389	0.087
04/26/02	4	1.957	0.122	2.094	0.131
04/25/02	3	2.698	0.169	3.010	0.188
04/24/02	2	2.592	0.162	2.300	0.144
04/23/02	1	2.344	0.146	2.306	0.144

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daily chromatograph

date requested: Jun 4 2002 1:07PM

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

Chromatograph Report For: 8030 - PERRY STREAM #1

download

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
06/04/2002	1037	0.884	0.301	0.587	95.498	2.578	0.444	0.104	0.093	0.031	0.018	0.049	0	0	0	0
06/03/2002	1036	0.922	0.311	0.587	95.513	2.523	0.434	0.104	0.090	0.032	0.019	0.052	0	0	0	0
06/02/2002	1032	0.851	0.326	0.583	96.138	1.994	0.403	0.101	0.086	0.031	0.018	0.052	0	0	0	0
06/01/2002	1033	0.868	0.365	0.584	95.974	2.044	0.436	0.111	0.094	0.034	0.020	0.054	0	0	0	0
05/31/2002	1033	0.886	0.365	0.585	95.942	2.052	0.438	0.114	0.095	0.035	0.020	0.053	0	0	0	0
05/30/2002	1031	0.851	0.332	0.583	96.229	1.897	0.394	0.103	0.089	0.033	0.019	0.053	0	0	0	0
05/29/2002	1031	0.816	0.327	0.582	96.254	1.922	0.391	0.100	0.082	0.034	0.020	0.055	0	0	0	0
05/28/2002	1032	0.827	0.322	0.583	96.210	1.954	0.408	0.101	0.081	0.030	0.018	0.050	0	0	0	0
05/27/2002	1031	0.844	0.332	0.583	96.175	1.984	0.401	0.095	0.077	0.028	0.017	0.047	0	0	0	0
05/26/2002	1033	0.829	0.315	0.584	96.067	2.059	0.438	0.106	0.086	0.031	0.018	0.051	0	0	0	0
05/25/2002	1034	0.863	0.304	0.584	95.968	2.114	0.443	0.110	0.093	0.033	0.019	0.053	0	0	0	0
05/24/2002	1034	0.856	0.291	0.584	96.013	2.075	0.450	0.112	0.095	0.034	0.020	0.055	0	0	0	0
05/23/2002	1038	0.980	0.277	0.589	95.554	2.244	0.551	0.149	0.116	0.044	0.024	0.062	0	0	0	0
05/22/2002	1041	0.960	0.279	0.590	95.302	2.428	0.612	0.164	0.128	0.046	0.024	0.058	0	0	0	0
05/21/2002	1042	0.891	0.281	0.590	95.359	2.436	0.617	0.161	0.131	0.044	0.023	0.057	0	0	0	0
05/20/2002	1045	0.927	0.301	0.593	94.953	2.674	0.682	0.179	0.146	0.049	0.026	0.063	0	0	0	0
05/19/2002	1043	0.953	0.289	0.592	95.082	2.558	0.665	0.174	0.143	0.048	0.025	0.062	0	0	0	0
05/18/2002	1043	0.929	0.287	0.591	95.131	2.574	0.641	0.166	0.136	0.047	0.025	0.063	0	0	0	0
05/17/2002	1052	0.978	0.294	0.598	94.364	2.955	0.847	0.224	0.179	0.060	0.031	0.070	0	0	0	0
05/16/2002	1048	0.942	0.295	0.594	94.712	2.800	0.758	0.197	0.157	0.052	0.026	0.061	0	0	0	0
05/15/2002	1041	0.864	0.297	0.589	95.287	2.586	0.587	0.143	0.119	0.039	0.022	0.054	0	0	0	0
05/14/2002	1045	0.902	0.298	0.592	94.942	2.718	0.687	0.178	0.144	0.048	0.025	0.058	0	0	0	0
05/13/2002	1044	0.900	0.280	0.591	95.095	2.631	0.657	0.171	0.136	0.047	0.025	0.057	0	0	0	0
05/12/2002	1044	0.905	0.270	0.591	95.121	2.620	0.647	0.169	0.134	0.048	0.026	0.062	0	0	0	0
05/11/2002	1044	0.867	0.280	0.591	95.082	2.736	0.625	0.156	0.127	0.044	0.024	0.058	0	0	0	0
05/10/2002	1047	0.887	0.283	0.593	94.822	2.883	0.679	0.171	0.140	0.048	0.026	0.061	0	0	0	0
05/09/2002	1046	0.889	0.276	0.592	94.963	2.764	0.665	0.170	0.138	0.048	0.026	0.062	0	0	0	0
05/08/2002	1044	0.873	0.281	0.591	95.133	2.659	0.629	0.163	0.130	0.046	0.025	0.061	0	0	0	0
05/07/2002	1042	0.851	0.286	0.589	95.361	2.522	0.578	0.150	0.121	0.044	0.025	0.062	0	0	0	0
05/06/2002	1043	0.877	0.288	0.591	95.168	2.632	0.612	0.160	0.127	0.047	0.026	0.063	0	0	0	0
05/05/2002	1044	0.891	0.298	0.591	95.041	2.764	0.602	0.154	0.121	0.045	0.025	0.059	0	0	0	0
05/04/2002	1039	0.901	0.303	0.588	95.326	2.682	0.473	0.109	0.088	0.037	0.023	0.058	0	0	0	0
05/03/2002	1033	0.958	0.313	0.586	95.605	2.478	0.394	0.088	0.071	0.030	0.018	0.044	0	0	0	0
05/02/2002	1030	0.877	0.294	0.582	96.274	1.957	0.352	0.088	0.071	0.029	0.017	0.041	0	0	0	0
05/01/2002	1029	0.902	0.287	0.582	96.304	1.926	0.345	0.089	0.070	0.027	0.016	0.035	0	0	0	0
04/30/2002	1028	0.895	0.284	0.581	96.362	1.880	0.344	0.087	0.070	0.027	0.015	0.035	0	0	0	0
04/29/2002	1029	0.887	0.291	0.581	96.335	1.900	0.346	0.088	0.074	0.027	0.016	0.037	0	0	0	0
04/28/2002	1029	0.903	0.291	0.582	96.319	1.873	0.362	0.094	0.077	0.028	0.016	0.036	0	0	0	0
04/27/2002	1030	0.917	0.290	0.583	96.176	1.982	0.373	0.097	0.079	0.029	0.017	0.039	0	0	0	0
04/26/2002	1031	0.930	0.282	0.583	96.082	2.068	0.374	0.097	0.078	0.030	0.018	0.041	0	0	0	0
04/25/2002	1030	0.913	0.282	0.583	96.129	2.074	0.357	0.092	0.075	0.027	0.016	0.035	0	0	0	0
04/24/2002	1028	0.872	0.288	0.581	96.387	1.900	0.329	0.085	0.066	0.025	0.014	0.034	0	0	0	0
04/23/2002	1030	0.901	0.278	0.582	96.183	2.045	0.353	0.090	0.074	0.026	0.015	0.035	0	0	0	0
04/22/2002	1030	0.903	0.279	0.582	96.158	2.053	0.359	0.093	0.076	0.028	0.016	0.035	0	0	0	0
04/21/2002	1029	0.921	0.280	0.582	96.221	1.993	0.348	0.091	0.070	0.026	0.015	0.035	0	0	0	0
04/20/2002	1029	0.927	0.274	0.582	96.236	1.976	0.352	0.091	0.071	0.026	0.015	0.033	0	0	0	0

04/19/2002	1029	0.923	0.281	0.582	96.218	1.994	0.344	0.088	0.070	0.027	0.017	0.038	0	0	0	0
04/18/2002	1029	0.930	0.280	0.582	96.260	1.956	0.339	0.087	0.068	0.027	0.016	0.036	0	0	0	0
04/17/2002	1029	0.869	0.295	0.582	96.293	1.957	0.342	0.088	0.070	0.028	0.017	0.042	0	0	0	0
04/16/2002	1034	0.922	0.290	0.586	95.788	2.236	0.455	0.119	0.093	0.034	0.019	0.044	0	0	0	0
04/15/2002	1029	0.923	0.291	0.582	96.206	1.976	0.357	0.092	0.073	0.028	0.016	0.037	0	0	0	0
04/14/2002	1028	0.911	0.291	0.581	96.318	1.921	0.329	0.085	0.067	0.026	0.016	0.036	0	0	0	0
04/13/2002	1027	0.916	0.287	0.581	96.366	1.926	0.299	0.076	0.060	0.023	0.014	0.032	0	0	0	0
04/12/2002	1027	0.929	0.296	0.581	96.310	1.948	0.304	0.077	0.061	0.025	0.015	0.036	0	0	0	0
04/11/2002	1028	0.933	0.302	0.582	96.216	1.980	0.337	0.084	0.066	0.027	0.016	0.039	0	0	0	0
04/10/2002	1031	0.908	0.307	0.583	96.054	2.116	0.359	0.091	0.071	0.030	0.019	0.045	0	0	0	0
04/09/2002	1029	0.860	0.304	0.581	96.273	1.997	0.331	0.083	0.064	0.028	0.017	0.042	0	0	0	0
04/08/2002	1028	0.858	0.306	0.580	96.425	1.874	0.317	0.082	0.063	0.025	0.015	0.036	0	0	0	0
04/07/2002	1033	0.894	0.311	0.584	95.964	2.132	0.413	0.104	0.084	0.033	0.019	0.045	0	0	0	0
04/06/2002	1031	0.912	0.327	0.584	95.902	2.260	0.358	0.084	0.066	0.029	0.018	0.043	0	0	0	0
04/05/2002	1038	1.007	0.298	0.590	95.207	2.616	0.531	0.133	0.102	0.039	0.022	0.046	0	0	0	0
04/04/2002	1038	1.000	0.285	0.589	95.298	2.560	0.515	0.134	0.102	0.039	0.022	0.046	0	0	0	0
04/03/2002	1043	1.002	0.279	0.592	95.012	2.651	0.625	0.166	0.129	0.049	0.027	0.061	0	0	0	0
04/02/2002	1047	0.949	0.286	0.594	94.907	2.649	0.693	0.181	0.156	0.060	0.037	0.082	0	0	0	0
04/01/2002	1045	0.904	0.284	0.592	95.097	2.570	0.652	0.168	0.146	0.058	0.037	0.083	0	0	0	0
03/31/2002	1046	0.921	0.278	0.593	95.063	2.584	0.659	0.171	0.150	0.058	0.036	0.081	0	0	0	0
03/30/2002	1045	0.925	0.289	0.592	95.092	2.552	0.655	0.167	0.147	0.057	0.036	0.081	0	0	0	0
03/29/2002	1047	0.969	0.285	0.594	94.870	2.655	0.698	0.181	0.159	0.060	0.037	0.085	0	0	0	0
03/28/2002	1048	0.929	0.280	0.594	94.910	2.641	0.704	0.182	0.163	0.062	0.039	0.088	0	0	0	0
03/27/2002	1048	0.949	0.281	0.595	94.789	2.713	0.730	0.191	0.164	0.061	0.037	0.085	0	0	0	0
03/26/2002	1044	0.933	0.295	0.592	95.075	2.583	0.643	0.166	0.142	0.054	0.032	0.076	0	0	0	0
03/25/2002	1044	0.922	0.295	0.592	95.131	2.539	0.642	0.167	0.142	0.054	0.032	0.077	0	0	0	0
03/24/2002	1042	0.909	0.288	0.590	95.324	2.463	0.590	0.155	0.128	0.048	0.028	0.068	0	0	0	0
03/23/2002	1038	0.889	0.285	0.588	95.555	2.388	0.523	0.135	0.105	0.041	0.023	0.055	0	0	0	0
03/22/2002	1040	0.839	0.285	0.588	95.574	2.380	0.543	0.142	0.111	0.043	0.025	0.058	0	0	0	0
03/21/2002	1042	0.864	0.281	0.590	95.309	2.524	0.606	0.159	0.124	0.048	0.027	0.060	0	0	0	0
03/20/2002	1040	0.869	0.285	0.588	95.462	2.487	0.530	0.135	0.105	0.043	0.026	0.057	0	0	0	0
03/19/2002	1033	0.919	0.287	0.584	95.757	2.448	0.353	0.083	0.064	0.029	0.019	0.040	0	0	0	0
03/18/2002	1032	0.910	0.282	0.584	95.835	2.400	0.337	0.082	0.065	0.030	0.019	0.041	0	0	0	0
03/17/2002	1032	0.867	0.287	0.583	95.962	2.336	0.324	0.075	0.061	0.028	0.019	0.042	0	0	0	0
03/15/2002	1037	0.899	0.309	0.587	95.550	2.460	0.464	0.115	0.090	0.037	0.022	0.052	0	0	0	0
03/14/2002	1041	0.905	0.311	0.590	95.274	2.546	0.575	0.149	0.115	0.044	0.024	0.057	0	0	0	0
03/13/2002	1033	0.910	0.305	0.584	95.804	2.354	0.369	0.093	0.072	0.031	0.018	0.045	0	0	0	0
03/12/2002	1031	0.946	0.339	0.584	95.763	2.441	0.302	0.071	0.055	0.025	0.016	0.042	0	0	0	0
03/11/2002	1030	0.897	0.323	0.583	95.961	2.303	0.306	0.071	0.056	0.025	0.016	0.042	0	0	0	0
03/10/2002	1030	0.965	0.302	0.584	95.866	2.340	0.307	0.075	0.059	0.026	0.016	0.042	0	0	0	0
03/09/2002	1029	0.918	0.295	0.582	96.125	2.195	0.270	0.069	0.055	0.024	0.014	0.037	0	0	0	0
03/08/2002	1029	0.873	0.287	0.581	96.181	2.180	0.279	0.070	0.056	0.024	0.014	0.036	0	0	0	0
03/07/2002	1028	0.880	0.303	0.581	96.275	2.061	0.277	0.068	0.057	0.025	0.015	0.038	0	0	0	0
03/06/2002	1027	0.781	0.310	0.579	96.625	1.816	0.264	0.065	0.054	0.026	0.017	0.042	0	0	0	0
03/05/2002	1026	0.745	0.321	0.578	96.681	1.842	0.227	0.054	0.046	0.024	0.016	0.044	0	0	0	0
03/04/2002	1028	0.791	0.339	0.580	96.450	1.927	0.280	0.064	0.054	0.029	0.020	0.047	0	0	0	0

Deliverer

August 11, 2001

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 8-06-01
Specific Gravity, 60 °F	ASTM D 4052	Report	0.8525
API, 60 °F		Min 28.0, Max 40.0	34.5
Kinematic Viscosity, 100 °F	ASTM D 445		
cSt		Min 1.8, Max 5.8	2.83
SUS		Max 40	35.4
Flash Point, °F	ASTM D 93	Min 100	159
Pour Point, °C	ASTM D 97	Max 20	-21
Sulfur, mass %	ASTM D 2622	Max 0.050	0.0382
Nitrogen, mass %	ASTM D4629	Max 0.03	0.0137
Distillation, °F			
IBP	ASTM D 86		371.1
5%			398.2
10%			424.4
15%			437.2
20%			449.4
30%			473.0
40%			495.7
50%			515.8
60%			537.2
70%			559.4
80%			585.2
90%		Max 650	619.6
95%			647.1
FBP			665.8
Recovery			97.1
Loss, vol%			1.8
Residue, vol%			1.1
Sediment, mass %	ASTM D 473	Max 0.1	0.01
Water, %	ASTM D 95	Max 0.1	<0.05
Ash, %	ASTM D482	Max 0.0003	<0.0003
Net Heat of Combustion	ASTM D 240		18318.5.0 Btu/lb
MMBTU/Barrel		Min 5.9	5.5
Hydrogen Content, wt %	ASTM D 3701	Min 12.0	13.03
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.09
10% Bottoms		Max 0.25	0.09
Particulate Contamination			
Filterable Dirt (mg/100 mL)			0.04
Silica Content, wt %			<0.01
Algae Growth			Not detected

(OMTPAHJISHGO) page 2 of 2

ATTACHMENT EU03-03

COMPLIANCE TEST REPORT

Sam O. Purdom Generating Station
July 1, 2002

CITY OF TALLAHASSEE

300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
850/891-0010
TDD 1-800/955-8771
talgov.com

March 22, 2002

CERTIFIED MAIL No. 7001 0360 0002 0770 0434

Tick Me

Ms. Mary Jean Yon
District Director
Florida Department of Environmental Protection
Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Re: Results of Visible Emission Compliance Testing at Sam O. Purdom Generating Station, Permit No. 1290001-003 - AV, Emission Unit -008 & Arvah B. Hopkins Generating Station, Permit No. 0730003-001-AV, Emission Unit's –002 & -003)

Dear Ms. Yon:

Please find attached the results of visible emissions compliance testing performed at the City of Tallahassee's Sam O. Purdom Generating Station and Arvah B. Hopkins Generating Station for the above referenced units. The results indicate that Sam O. Purdom Emission Unit -008 meets compliance at a heat input of 197 million British thermal units per hour (mmBtu/hr) with a maximum six-minute average opacity of 10 percent. The results also indicate that Arvah B. Hopkins Emission Unit -002 meets compliance at a heat input of 207 mmBtu/hr with a maximum six-minute average opacity of 15 percent and Emission Unit -003 meets compliance at a heat input of 330 mmBtu/hr with a maximum six-minute average opacity of 5 percent.

It should be noted that these tests were performed pursuant to Specific Condition C.15(a)8 of Permit No. 0730003-001-AV and D.15(a)8 of Permit No. 1290001-003-AV which requires at least one visible emission test be conducted once per each five-year period, coinciding with the term of its air operation permit. Weather conditions in the Tallahassee region during the week of February 25th allowed the City an opportunity to complete some of these required visible emissions tests. However, a scheduled outage for Sam O. Purdom Emission Unit –009 prevented visible emission testing from being completed at that time. The City plans to complete visible emissions testing on Emission Unit –009 before the mid-year deadline for submitting the Title V renewal application.

If you have any questions regarding the attached test results, please feel free to contact myself at (850) 891-5534 or Jennette Curtis at (850) 891-8850.

Yours Truly,

R.E. McGarrah
Electric Production Manager

Attachments

cc: Gerry Neubauer, FDEP Northwest District Office - Tallahassee, w/attachments
Cynthia Barber, COT, Utility Business & Customer Services, w/attachments
Gordon King, COT Purdom Generating Station, w/attachments
Triveni Singh, COT Hopkins Generating Station, w/attachments
Jennette Curtis, COT Environmental Resources, w/attachments
Hal Avery, COT Environmental Resources, w/attachments

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BEST AVAILABLE COPY

EPA
SIBLE EMISSION OBSERVATION FORM 1

Form Number	P	C	T	1	1	Page 1 Of 2
Continued on VEO Form Number						P C T 1 2

Method Used (Circle One): Method 9 | 203A | 203B | Other: _____

Name: City of Tallahassee

Facility Name: Sam O. Purdom Generating Station

Street Address: 667 Port Leon Drive

City: St. Marks | State: Florida | Zip: 32355

Process	Unit #	Operating Mode
Combustion Turbine - Oil Fired	008	197 mmBTU / hr. LHV
Control Equipment		Operating Mode
none		n/a

Describe Emission Point: ground metal stack located on east side of combustion Turbine Building; 10' diameter

Height of Emiss. Pt.		Height of Emiss. Pt. Rel. to Observer	
Start ~38'	End ~38'	Start ~36'	End ~36'
Distance to Emiss. Pt.		Direction to Emiss. Pt. (Degrees)	
Start ~125'	End ~125'	Start 271	End 271

Vertical Angle to Obs. Pt.		Direction to Obs. Pt. (Degrees)	
Start 16	End 16	Start 271	End 271

Distance and Direction to Observation Point from Emission Point: Start 1' above stack | End same

Describe Emissions: Start coning | End coning

Emission Color: Start black | End black

Water Droplet Plume: Attached ☐ Detached ☐ None ☒

Describe Background: Start SKY | End SKY

Background Color: Start blue | End blue

Sky Conditions: Start scattered | End same

Wind Speed: Start 2-6 | End 2-6

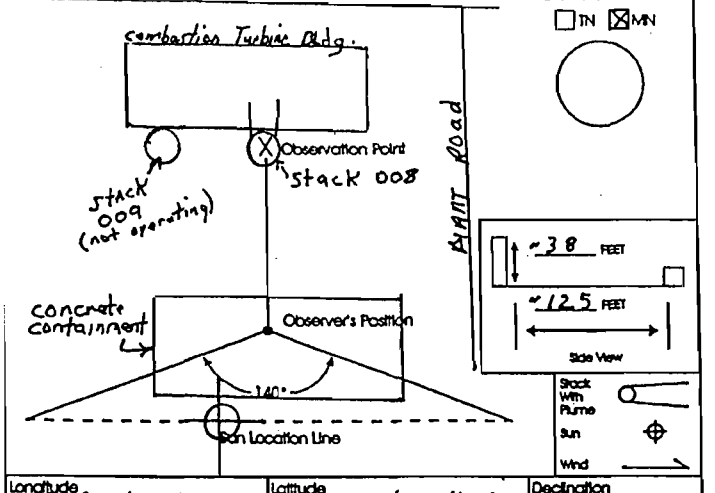
Wind Direction: Start SE | End SE

Ambient Temp.: Start 38 | End 41

Wet Bulb Temp.: 29

RH Percent: 27

PORT LEON DRIVE Source Layout Sketch



Longitude: 84°12'10"W | Latitude: 30°09'47"N | Declination: -3

Observation Date	Time Zone	Start Time	End Time
3-1-02	EST	07:40	08:39

Min \ Sec	0	15	30	45	Comments
1	10	10	10	10	
2	10	10	10	10	
3	10	10	10	10	
4	10	10	10	10	
5	10	10	10	10	
6	10	10	10	10	
7	10	10	10	10	
8	10	10	10	10	
9	10	10	10	10	
10	10	10	10	10	
11	10	10	10	10	
12	10	10	10	10	
13	10	10	10	10	
14	10	10	10	10	
15	10	10	10	10	
16	10	10	10	10	
17	10	10	10	10	
18	10	10	10	10	
19	10	10	10	10	
20	10	10	10	10	
21	10	10	10	10	
22	10	10	10	10	
23	10	10	10	10	
24	10	10	10	10	
25	10	10	10	10	
26	10	10	10	10	
27	10	10	10	10	
28	10	10	10	10	
29	10	10	10	10	
30	10	10	10	10	

Observer's Name (Print): Hal Avery

Observer's Signature: Hal Avery | Date: 3-1-02

Organization: City of Tallahassee

Certified By: ETA | Date: 2-20-02

Additional Information: Permit No. 1290001-003-AV

VEO 1.1

EPA
SIBLE EMISSION OBSERVATION FORM 1

Form Number	P	C	T	1	2	Page 2 of 2
Continued on VEO Form Number						

hod Used (Circle One)
(Method 9) 203A 203B Other: _____

me
y of Tallahassee
ity Name
Sam O. Purdom Generating Station
et Address
667 Port Leon Drive
St. Marks | State Florida | Zip 32355

cess | Unit # | Operating Mode
trol Equipment | Operating Mode

cribe Emission Point

ght of Emiss. Pt. ft End | Height of Emiss. Pt. Rel. to Observer Start End
ance to Emiss. Pt. ft End | Direction to Emiss. Pt. (Degrees) Start End

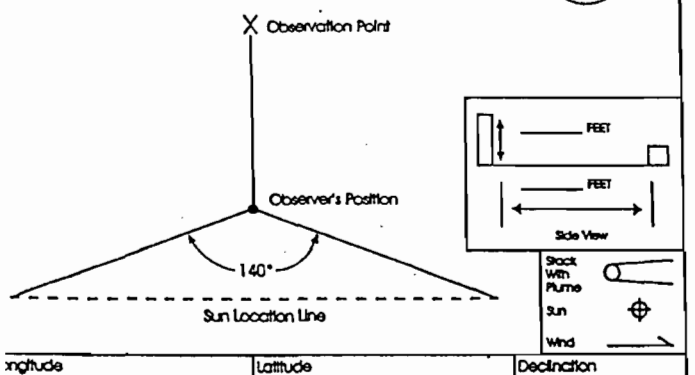
tical Angle to Obs. Pt. ft End | Direction to Obs. Pt. (Degrees) Start End
tance and Direction to Observation Point from Emission Point ft End

cribe Emissions ft End
ission Color ft End | Water Droplet Plume Attached ☐ Detached ☐ None ☐

ne Background End
ound Color ft End | Sky Conditions Start End
nd Speed ft End | Wind Direction Start End
mbient Temp. ft End | Wet Bulb Temp. | RH Percent

Source Layout Sketch

Draw North Arrow ☐ TN ☐ MN



ngitude | Latitude | Declination

information
ermit No. 1290001-003-AV

Observation Date	Time Zone	Start Time	End Time
3-1-02	EST	07:40	08:39

Sec / Min	0	15	30	45	Comments
1	10	10	10	10	
2	10	10	10	10	
3	10	10	10	10	
4	10	10	10	10	
5	10	10	10	10	
6	10	10	10	10	
7	10	10	10	10	
8	10	10	10	10	
9	10	10	10	10	
10	10	10	10	10	
11	10	10	10	10	
12	10	10	10	10	
13	10	10	10	10	
14	10	10	10	10	
15	10	10	10	10	
16	10	10	10	10	
17	10	10	10	10	
18	10	10	10	10	
19	10	10	10	10	
20	10	10	10	10	
21	10	10	10	10	
22	10	10	10	10	
23	10	10	10	10	
24	10	10	10	10	
25	10	10	10	10	
26	10	10	10	10	
27	10	10	10	10	
28	10	10	10	10	
29	10	10	10	10	
30	10	10	10	10	

Observer's Name (Print) Hal Avery
Observer's Signature Hal Avery | Date 3-1-02
Organization City of Tallahassee
Certified By ETA | Date 2-20-02

EQFY1.1

VISIBLE EMISSIONS EVALUATOR

This is to certify that

Hal Avery

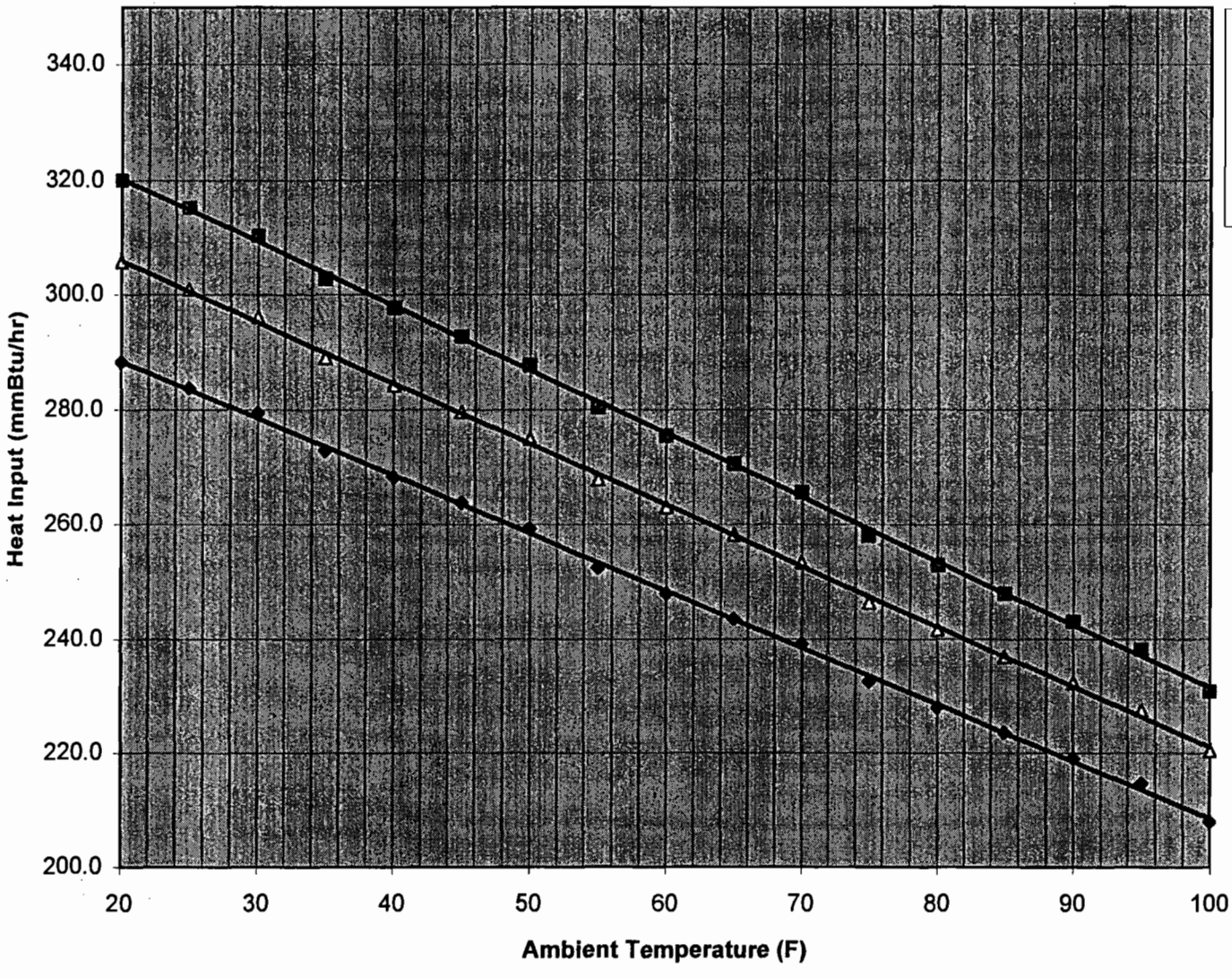
met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

292581	*Tampa, Florida*	*February 20, 2002*
Certificate Number	Location	Date of Issue

Thomas Hoze
President

Michael W. Lunsford
Director of Training

Purdom GT Heat Input Limit (mmBtu/hr)



◆ Heat Input Limit (mmBtu/hr - LHV)

■ Natural Gas Heat Input Limit (mmBtu/hr - HHV)

△ No. 2 Fuel Oil Heat Input Limit (mmBtu/hr - HHV)

NOTES:

- Applied Westinghouse recommended HHV:LHV ratio of 1.11 for natural gas and 1.06 for diesel
- Assumed the permitted heat input limit (228 mmBtu/hr LHV@80F) is corrected for elevation (sea level) and barometric pressure.

ATTACHMENT EU03-04

PROCEDURES FOR STARTUP AND SHUT DOWN

Sam O. Purdom Generating Station
July 1, 2002

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the gas turbines at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the gas turbines. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU03-05

ALTERNATIVE METHODS OF OPERATION

Sam O. Purdom Generating Station
July 1, 2002

Alternative Methods of Operation

Combustion Turbine No. 1 (EU03) is used as a peaking and emergency reserve unit. It is fueled by natural gas or No. 2 fuel oil. The alternative methods of operation (AMO) associated with the combustion turbine are related to the type of fuel being fired and rate of operation. The combustion turbine has a nominal production capacity of 12.3 MW. The current AMOs include the following:

- Natural Gas Firing - Maximum Rate of 228 mmBtu/hr (LHV)
- No. 2 Fuel Oil Firing - Maximum Rate of 228 mmBtu/hr (LHV)

Note: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

ATTACHMENT EU03-06

ADDITIONAL APPLICABLE REQUIREMENTS

Additional Applicable Requirements

The City of Tallahassee requests the following revisions to be incorporated into the Title V Operating Permit:

D.13. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at permitted capacity, which is defined as ~~95~~ 90 – 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and ~~105~~ 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Rule 62-297.310(2), F.A.C. ~~A065-242827 Specific Condition No. 2; and, Applicant Request dated June 24, 1997.~~]

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Combustion Turbine No. 2

4. Emissions Unit Identification Number:
[ ] No ID ID: **009** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**≈ 1963**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

The maximum allowable operating rate is 228 mmBtu/hr (lower heating value) at an ambient temperature of 80 degrees Fahrenheit when firing fuel oil or natural gas. The maximum hours of operation are not limited, but the unit is subject to the NOx and SO_2 facility wide emissions caps.

Emissions Unit Information Section 4 of 7

Emissions Unit Control Equipment

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

Fuel Quality

Pursuant to Specific Condition D.6. of current Operating Permit No. 1290001-003-AV, the City of Tallahassee is authorized to fire natural gas, or Number 2 fuel oil with a maximum sulfur content of 0.05% by weight.

2. Control Device or Method Code(s):

Use of Fuel with Low Sulfur Content – No Code

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Westinghouse**
   Model Number: **W171G**
2. Generator Nameplate Rating: **12.3** MW (nominal)
3. Incinerator Information: **N/A**

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: **228** mmBtu/hr		
2.	Maximum Incineration Rate: **N/A**	lb/hr	tons/day
3.	Maximum Process or Throughput Rate: **N/A**		
4.	Maximum Production Rate: **N/A**		
5.	Requested Maximum Operating Schedule:		
	24 hours/day		**52** days/week
	52 weeks/year		**8,760** hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

The maximum heat input rate reflects operation at an ambient temperature of 80° Fahrenheit based on the lower heating value of the fuels. All values herein are based on the value contained in Field 1 above.

Combustion Turbine No. 2 at the Purdom Generating Station has been offline for several months to complete a regularly scheduled inspection and overhaul. The unit also underwent an upgrade to the system controls and monitors used by facility personnel to operate the unit. The unit was brought on-line on June 14, 2002, for the purpose of visible emissions testing as required by Condition D.15. of Permit No. 1290001-003-AV. During the test, it was determined that additional tuning of the system controls is necessary in order to re-achieve maximum operating capacity. The results of the June 14, 2002, VE test are attached hereto as EU04-03.

The Applicant requests that the unit be subject to the maximum heat input rate contained in current operating permit No. 1290001-003-AV until such time as tuning can be completed and the unit brought on-line.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Rule 62-210.700(1),(4),(6) F.A.C	
Rule 62-296.320(4),(b) F.A.C	
Rule 62-297.310(2) F.A.C.	
Rule 62-297.310(4)(a)(2)(except a-c) F.A.C.	
Rule 62-297.310(7)(a)3,4a,8,9 F.A.C.	
Rule 62-297.310(8) F.A.C.	
40 CFR 72.6(b)(1)	
40 CFR 63.50 - 63.55	

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? **EU-04**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **The emission point represents the exhaust from Combustion Turbine No.2**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **38** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **880** °F	9. Actual Volumetric Flow Rate: **395,080** acfm	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**	
13. Emission Point UTM Coordinates: Zone: **16** East (km): **769.421** North (km): **3339.813**		
14. Emission Point Comment (limit to 200 characters): **Value in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

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):		
Natural Gas		
2. Source Classification Code (SCC):	3. SCC Units:	
20100201	**mmSCF**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
0.245	**2143**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
*	**N/A**	**932 (LHV)**
10. Segment Comment (limit to 200 characters):		
***Clean pipeline quality natural gas with sulfur content limited to FERC tariff. The value in Field 9 is an estimate subject to fluctuation.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
Number 2 (0.05% Sulfur) Diesel Fuel Oil		
2. Source Classification Code (SCC):	3. SCC Units:	
20100101	**Gallons**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
1,740	**1.52×10^7**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
0.05	**N/A**	**0.131 (LHV)**
10. Segment Comment (limit to 200 characters):		
The value in Field 9 is an estimate and subject to fluctuation. **Fuel additives typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin may be used.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			**NS**
NOx			**EL**
PM			**NS**
PM_{10}			**NS**
SO_2			**EL**
VOC			**NS**
H106			**NS**
H107			**NS**
H133			**NS**
HAPS			**NS**

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **N/A**	
3. Potential Emissions: **11.7** lb/hour **CAP** tons/year		4. Synthetically Limited? **[X]**
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: **N/A** Reference:		7. Emissions Method Code: **0**

8. Calculation of Emissions (limit to 600 characters):

Fuel Oil Sulfur Content: 0.05% (wt)
Fuel Oil Usage Rate: 1,740 gal/hr
MW SO_2: 64
MW S: 32

lb/hr = (1,740 gal/hr) x (7.05 lb/gal) x (0.05/100) x (64/32) x (95/100) = 11.7 lb/hr

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Potential emission rate reflects firing Number 2 (0.05% Sulfur) diesel fuel oil with 95 percent conversion of the sulfur to SO2. Combustion Turbine No. 2 will be part of the requested facility-wide SO2 and NOx caps.

Allowable Emissions

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **0.05% Sulfur (wt) and 80 TPY cap for the facility**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year

5. Method of Compliance (limit to 60 characters):

Compliance will be based on unit fuel usage data, fuel density, and vendor fuel data

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

Annual emissions will be based on actual sulfur content of the natural gas and Number 2 (0.05% Sulfur) diesel fuel oil.

Potential/Fugitive Emissions

1. Pollutant Emitted: **NOx**

2. Total Percent Efficiency of Control: **N/A**

3. Potential Emissions:
159.1 lb/hour **CAP** tons/year

4. Synthetically Limited?
[**X**]

5. Range of Estimated Fugitive Emissions: **N/A**
[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor: **N/A**
Reference:

7. Emissions Method Code:
3

8. Calculation of Emissions (limit to 600 characters):

Maximum Firing Rate: 228 mmBtu/hr
Emission Factor: 0.698 lb/mmBtu

lb/hr = (228 mmBtu/hr) x (0.698 lb-NOx/mmBtu) = 159.1 lb/hr

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Future potential annual emissions will be part of the requested facility-wide cap on NOx emissions.

Allowable Emissions

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **467 TPY Cap for the facility**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year
5. Method of Compliance (limit to 60 characters): **Compliance will be based on unit specific fuel usage logs, AP-42 emission factors, and vendor fuel data**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Annual emissions will be based on the AP-42 emission factors [0.44 lb/mmBtu – natural gas and 0.698 lb/mmBtu – No. 2 diesel fuel].**	

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

Visible Emissions Limitation:

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **< 20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9 in any fiscal year in which the turbine operates greater than 400 hours.**	
5. Visible Emissions Comment (limit to 200 characters): **In accordance with Rule 62-210.700(1), F.A.C., excess emissions resulting from startup, shutdown, or malfunction are permitted providing that the duration of excess emissions be minimized but in no case to exceed two hours in any 24 hour period unless authorized by the Department for longer duration.**	

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

Continuous Monitoring System:

1. Parameter Code: **N/A**	2. Pollutant(s): **N/A**
3. CMS Requirement: [ ] Rule [ ] Other	
4. Monitor Information: **N/A** Manufacturer: Model Number: Serial Number:	
5. Installation Date: **N/A**	6. Performance Specification Test Date: **N/A**
7. Continuous Monitor Comment (limit to 200 characters): **N/A**	

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

Supplemental Requirements

1. Process Flow Diagram [**X**] Attached, Document ID: **EU04-01** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU04-02** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [**X**] Attached, Document ID: **EU04-03** [ ] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU04-04** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU04-05** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU04-06** [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

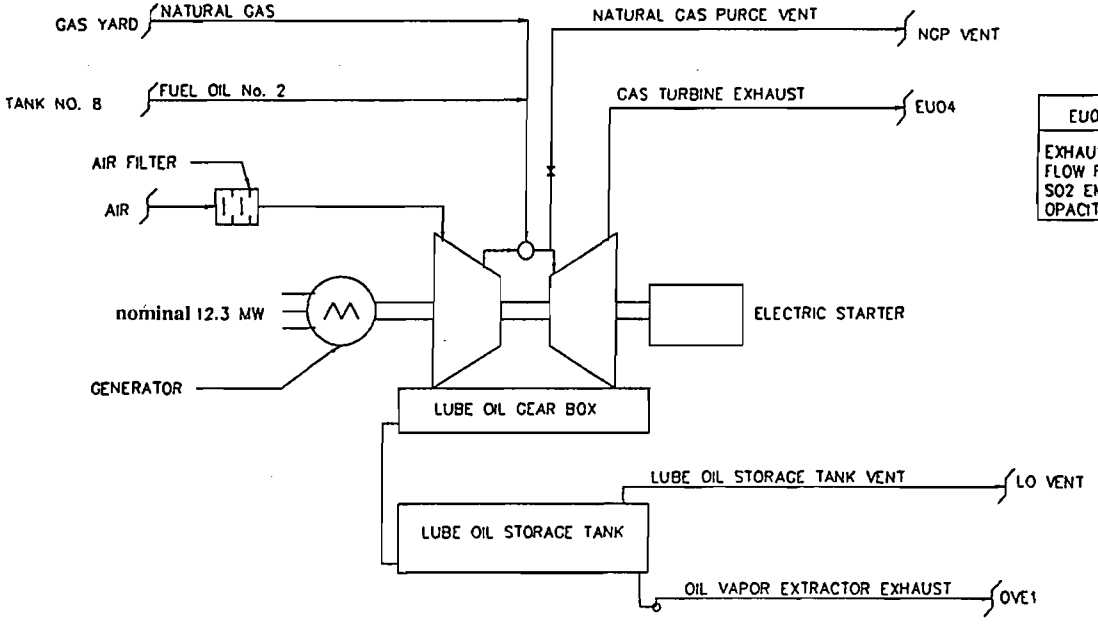
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT EU04-01

PROCESS FLOW DIAGRAM

Sam O. Purdom Generating Station
July 1, 2002



EU04 – EXHAUST PARAMETERS
EXHAUST TEMP. – 880 F FLOW RATE – 395,080 ACFM SO2 EMISSIONS – 97.4 LBS/HR OPACITY– <20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 2 FUEL OIL
HEAT RATE (MMBTU/HR)	228	228
FEED RATE (MMCF/HR)	0.228	N/A
FEED RATE (KGAL/HR)	N/A	1.73
FEED RATE (LB/HR)	N/A	12,175

CITY OF TALLAHASSEE, FLORIDA
TITLE V PERMIT APPLICATION
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBUSTION TURBINE NO. 2

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE 3/15/95	BY: DJC CKD BY: DF REV. BY: CJT	CAD FILE NO. PCT1.DWG FIGURE NO. EU04-02

ATTACHMENT EU04-02

FUEL ANALYSIS

Sam O. Purdom Generating Station
July 1, 2002

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU04, Combustion Turbine No.2. Maximum values could be higher. The fuels represented by the analyses include clean pipeline quality natural gas and No. 2 (0.05% Sulfur) diesel fuel oil.

FGT
Last Updated 5/28/02 7:56

Station Name	Total Sulfur Previous Day Avg ppm 05/26/02	Total Sulfur Previous Day Avg Grains/hcf 05/26/02
Perry 36" Stream #1	2.1	0.132
Perry 30" Stream #2	2.9	0.184
Perry 24" Stream #3	3.3	0.206
Brooker 24" Stream	3.0	0.187

Florida Gas makes no warranty or representation whatsoever as to the accuracy of th
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30 Stream #: Avg Grains/
05/25/02	33	2.128	0.133	3.668	0.229
05/24/02	32	2.366	0.148	4.319	0.270
05/23/02	31	3.001	0.188	4.979	0.311
05/22/02	30	3.906	0.244	4.767	0.298
05/21/02	29	4.803	0.300	4.542	0.284
05/20/02	28	3.510	0.219	4.099	0.256
05/19/02	27	3.311	0.207	3.865	0.242
05/18/02	26	3.893	0.243	5.044	0.315
05/17/02	25	2.135	0.133	2.128	0.133
05/16/02	24	1.986	0.124	1.757	0.110
05/15/02	23	2.757	0.172	2.019	0.126
05/14/02	22	2.210	0.138	1.694	0.106
05/13/02	21	1.901	0.119	1.844	0.115
05/12/02	20	1.827	0.114	1.536	0.096
05/11/02	19	1.820	0.114	1.292	0.081
05/10/02	18	1.848	0.115	1.409	0.088
05/09/02	17	1.656	0.104	1.365	0.085
05/08/02	16	1.871	0.117	1.570	0.098
05/07/02	15	2.676	0.167	2.158	0.135
05/06/02	14	2.819	0.176	2.233	0.140
05/05/02	13	2.428	0.152	1.901	0.119
05/04/02	12	3.045	0.190	2.126	0.133
05/03/02	11	2.941	0.184	2.316	0.145
05/02/02	10	2.381	0.149	2.045	0.128
05/01/02	9	1.863	0.116	1.625	0.102
04/30/02	8	1.648	0.103	1.374	0.086
04/29/02	7	1.746	0.109	1.343	0.084
04/28/02	6	1.709	0.107	1.387	0.087
04/27/02	5	1.640	0.103	1.389	0.087
04/26/02	4	1.957	0.122	2.094	0.131
04/25/02	3	2.698	0.169	3.010	0.188
04/24/02	2	2.592	0.162	2.300	0.144
04/23/02	1	2.344	0.146	2.306	0.144

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daily chromatograph

date requested: Jun 4 2002 1:07PM

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

Chromatograph Report For: 8030 - PERRY STREAM #1

download

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
06/04/2002	1037	0.884	0.301	0.587	95.498	2.578	0.444	0.104	0.093	0.031	0.018	0.049	0	0	0	0
06/03/2002	1036	0.922	0.311	0.587	95.513	2.523	0.434	0.104	0.090	0.032	0.019	0.052	0	0	0	0
06/02/2002	1032	0.851	0.326	0.583	96.138	1.994	0.403	0.101	0.086	0.031	0.018	0.052	0	0	0	0
06/01/2002	1033	0.868	0.365	0.584	95.974	2.044	0.436	0.111	0.094	0.034	0.020	0.054	0	0	0	0
05/31/2002	1033	0.886	0.365	0.585	95.942	2.052	0.438	0.114	0.095	0.035	0.020	0.053	0	0	0	0
05/30/2002	1031	0.851	0.332	0.583	96.229	1.897	0.394	0.103	0.089	0.033	0.019	0.053	0	0	0	0
05/29/2002	1031	0.816	0.327	0.582	96.254	1.922	0.391	0.100	0.082	0.034	0.020	0.055	0	0	0	0
05/28/2002	1032	0.827	0.322	0.583	96.210	1.954	0.408	0.101	0.081	0.030	0.018	0.050	0	0	0	0
05/27/2002	1031	0.844	0.332	0.583	96.175	1.984	0.401	0.095	0.077	0.028	0.017	0.047	0	0	0	0
05/26/2002	1033	0.829	0.315	0.584	96.067	2.059	0.438	0.106	0.086	0.031	0.018	0.051	0	0	0	0
05/25/2002	1034	0.863	0.304	0.584	95.968	2.114	0.443	0.110	0.093	0.033	0.019	0.053	0	0	0	0
05/24/2002	1034	0.856	0.291	0.584	96.013	2.075	0.450	0.112	0.095	0.034	0.020	0.055	0	0	0	0
05/23/2002	1038	0.980	0.277	0.589	95.554	2.244	0.551	0.149	0.116	0.044	0.024	0.062	0	0	0	0
05/22/2002	1041	0.960	0.279	0.590	95.302	2.428	0.612	0.164	0.128	0.046	0.024	0.058	0	0	0	0
05/21/2002	1042	0.891	0.281	0.590	95.359	2.436	0.617	0.161	0.131	0.044	0.023	0.057	0	0	0	0
05/20/2002	1045	0.927	0.301	0.593	94.953	2.674	0.682	0.179	0.146	0.049	0.026	0.063	0	0	0	0
05/19/2002	1043	0.953	0.289	0.592	95.082	2.558	0.665	0.174	0.143	0.048	0.025	0.062	0	0	0	0
05/18/2002	1043	0.929	0.287	0.591	95.131	2.574	0.641	0.166	0.136	0.047	0.025	0.063	0	0	0	0
05/17/2002	1052	0.978	0.294	0.598	94.364	2.955	0.847	0.224	0.179	0.060	0.031	0.070	0	0	0	0
05/16/2002	1048	0.942	0.295	0.594	94.712	2.800	0.758	0.197	0.157	0.052	0.026	0.061	0	0	0	0
05/15/2002	1041	0.864	0.297	0.589	95.287	2.586	0.587	0.143	0.119	0.039	0.022	0.054	0	0	0	0
05/14/2002	1045	0.902	0.298	0.592	94.942	2.718	0.687	0.178	0.144	0.048	0.025	0.058	0	0	0	0
05/13/2002	1044	0.900	0.280	0.591	95.095	2.631	0.657	0.171	0.136	0.047	0.025	0.057	0	0	0	0
05/12/2002	1044	0.905	0.270	0.591	95.121	2.620	0.647	0.169	0.134	0.048	0.026	0.062	0	0	0	0
05/11/2002	1044	0.867	0.280	0.591	95.082	2.736	0.625	0.156	0.127	0.044	0.024	0.058	0	0	0	0
05/10/2002	1047	0.887	0.283	0.593	94.822	2.883	0.679	0.171	0.140	0.048	0.026	0.061	0	0	0	0
05/09/2002	1046	0.889	0.276	0.592	94.963	2.764	0.665	0.170	0.138	0.048	0.026	0.062	0	0	0	0
05/08/2002	1044	0.873	0.281	0.591	95.133	2.659	0.629	0.163	0.130	0.046	0.025	0.061	0	0	0	0
05/07/2002	1042	0.851	0.286	0.589	95.361	2.522	0.578	0.150	0.121	0.044	0.025	0.062	0	0	0	0
05/06/2002	1043	0.877	0.288	0.591	95.168	2.632	0.612	0.160	0.127	0.047	0.026	0.063	0	0	0	0
05/05/2002	1044	0.891	0.298	0.591	95.041	2.764	0.602	0.154	0.121	0.045	0.025	0.059	0	0	0	0
05/04/2002	1039	0.901	0.303	0.588	95.326	2.682	0.473	0.109	0.088	0.037	0.023	0.058	0	0	0	0
05/03/2002	1033	0.958	0.313	0.586	95.605	2.478	0.394	0.088	0.071	0.030	0.018	0.044	0	0	0	0
05/02/2002	1030	0.877	0.294	0.582	96.274	1.957	0.352	0.088	0.071	0.029	0.017	0.041	0	0	0	0
05/01/2002	1029	0.902	0.287	0.582	96.304	1.926	0.345	0.089	0.070	0.027	0.016	0.035	0	0	0	0
04/30/2002	1028	0.895	0.284	0.581	96.362	1.880	0.344	0.087	0.070	0.027	0.015	0.035	0	0	0	0
04/29/2002	1029	0.887	0.291	0.581	96.335	1.900	0.346	0.088	0.074	0.027	0.016	0.037	0	0	0	0
04/28/2002	1029	0.903	0.291	0.582	96.319	1.873	0.362	0.094	0.077	0.028	0.016	0.036	0	0	0	0
04/27/2002	1030	0.917	0.290	0.583	96.176	1.982	0.373	0.097	0.079	0.029	0.017	0.039	0	0	0	0
04/26/2002	1031	0.930	0.282	0.583	96.082	2.068	0.374	0.097	0.078	0.030	0.018	0.041	0	0	0	0
04/25/2002	1030	0.913	0.282	0.583	96.129	2.074	0.357	0.092	0.075	0.027	0.016	0.035	0	0	0	0
04/24/2002	1028	0.872	0.288	0.581	96.387	1.900	0.329	0.085	0.066	0.025	0.014	0.034	0	0	0	0
04/23/2002	1030	0.901	0.278	0.582	96.183	2.045	0.353	0.090	0.074	0.026	0.015	0.035	0	0	0	0
04/22/2002	1030	0.903	0.279	0.582	96.158	2.053	0.359	0.093	0.076	0.028	0.016	0.035	0	0	0	0
04/21/2002	1029	0.921	0.280	0.582	96.221	1.993	0.348	0.091	0.070	0.026	0.015	0.035	0	0	0	0
04/20/2002	1029	0.927	0.274	0.582	96.236	1.976	0.352	0.091	0.071	0.026	0.015	0.033	0	0	0	0

04/19/2002	1029	0.923	0.281	0.582	96.218	1.994	0.344	0.088	0.070	0.027	0.017	0.038	0	0	0	0
04/18/2002	1029	0.930	0.280	0.582	96.260	1.956	0.339	0.087	0.068	0.027	0.016	0.036	0	0	0	0
04/17/2002	1029	0.869	0.295	0.582	96.293	1.957	0.342	0.088	0.070	0.028	0.017	0.042	0	0	0	0
04/16/2002	1034	0.922	0.290	0.586	95.788	2.236	0.455	0.119	0.093	0.034	0.019	0.044	0	0	0	0
04/15/2002	1029	0.923	0.291	0.582	96.206	1.976	0.357	0.092	0.073	0.028	0.016	0.037	0	0	0	0
04/14/2002	1028	0.911	0.291	0.581	96.318	1.921	0.329	0.085	0.067	0.026	0.016	0.036	0	0	0	0
04/13/2002	1027	0.916	0.287	0.581	96.366	1.926	0.299	0.076	0.060	0.023	0.014	0.032	0	0	0	0
04/12/2002	1027	0.929	0.296	0.581	96.310	1.948	0.304	0.077	0.061	0.025	0.015	0.036	0	0	0	0
04/11/2002	1028	0.933	0.302	0.582	96.216	1.980	0.337	0.084	0.066	0.027	0.016	0.039	0	0	0	0
04/10/2002	1031	0.908	0.307	0.583	96.054	2.116	0.359	0.091	0.071	0.030	0.019	0.045	0	0	0	0
04/09/2002	1029	0.860	0.304	0.581	96.273	1.997	0.331	0.083	0.064	0.028	0.017	0.042	0	0	0	0
04/08/2002	1028	0.858	0.306	0.580	96.425	1.874	0.317	0.082	0.063	0.025	0.015	0.036	0	0	0	0
04/07/2002	1033	0.894	0.311	0.584	95.964	2.132	0.413	0.104	0.084	0.033	0.019	0.045	0	0	0	0
04/06/2002	1031	0.912	0.327	0.584	95.902	2.260	0.358	0.084	0.066	0.029	0.018	0.043	0	0	0	0
04/05/2002	1038	1.007	0.298	0.590	95.207	2.616	0.531	0.133	0.102	0.039	0.022	0.046	0	0	0	0
04/04/2002	1038	1.000	0.285	0.589	95.298	2.560	0.515	0.134	0.102	0.039	0.022	0.046	0	0	0	0
04/03/2002	1043	1.002	0.279	0.592	95.012	2.651	0.625	0.166	0.129	0.049	0.027	0.061	0	0	0	0
04/02/2002	1047	0.949	0.286	0.594	94.907	2.649	0.693	0.181	0.156	0.060	0.037	0.082	0	0	0	0
04/01/2002	1045	0.904	0.284	0.592	95.097	2.570	0.652	0.168	0.146	0.058	0.037	0.083	0	0	0	0
03/31/2002	1046	0.921	0.278	0.593	95.063	2.584	0.659	0.171	0.150	0.058	0.036	0.081	0	0	0	0
03/30/2002	1045	0.925	0.289	0.592	95.092	2.552	0.655	0.167	0.147	0.057	0.036	0.081	0	0	0	0
03/29/2002	1047	0.969	0.285	0.594	94.870	2.655	0.698	0.181	0.159	0.060	0.037	0.085	0	0	0	0
03/28/2002	1048	0.929	0.280	0.594	94.910	2.641	0.704	0.182	0.163	0.062	0.039	0.088	0	0	0	0
03/27/2002	1048	0.949	0.281	0.595	94.789	2.713	0.730	0.191	0.164	0.061	0.037	0.085	0	0	0	0
03/26/2002	1044	0.933	0.295	0.592	95.075	2.583	0.643	0.166	0.142	0.054	0.032	0.076	0	0	0	0
03/25/2002	1044	0.922	0.295	0.592	95.131	2.539	0.642	0.167	0.142	0.054	0.032	0.077	0	0	0	0
03/24/2002	1042	0.909	0.288	0.590	95.324	2.463	0.590	0.155	0.128	0.048	0.028	0.068	0	0	0	0
03/23/2002	1038	0.889	0.285	0.588	95.555	2.388	0.523	0.135	0.105	0.041	0.023	0.055	0	0	0	0
03/22/2002	1040	0.839	0.285	0.588	95.574	2.380	0.543	0.142	0.111	0.043	0.025	0.058	0	0	0	0
03/21/2002	1042	0.864	0.281	0.590	95.309	2.524	0.606	0.159	0.124	0.048	0.027	0.060	0	0	0	0
03/20/2002	1040	0.869	0.285	0.588	95.462	2.487	0.530	0.135	0.105	0.043	0.026	0.057	0	0	0	0
03/19/2002	1033	0.919	0.287	0.584	95.757	2.448	0.353	0.083	0.064	0.029	0.019	0.040	0	0	0	0
03/18/2002	1032	0.910	0.282	0.584	95.835	2.400	0.337	0.082	0.065	0.030	0.019	0.041	0	0	0	0
03/17/2002	1032	0.867	0.287	0.583	95.962	2.336	0.324	0.075	0.061	0.028	0.019	0.042	0	0	0	0
03/15/2002	1037	0.899	0.309	0.587	95.550	2.460	0.464	0.115	0.090	0.037	0.022	0.052	0	0	0	0
03/14/2002	1041	0.905	0.311	0.590	95.274	2.546	0.575	0.149	0.115	0.044	0.024	0.057	0	0	0	0
03/13/2002	1033	0.910	0.305	0.584	95.804	2.354	0.369	0.093	0.072	0.031	0.018	0.045	0	0	0	0
03/12/2002	1031	0.946	0.339	0.584	95.763	2.441	0.302	0.071	0.055	0.025	0.016	0.042	0	0	0	0
03/11/2002	1030	0.897	0.323	0.583	95.961	2.303	0.306	0.071	0.056	0.025	0.016	0.042	0	0	0	0
03/10/2002	1030	0.965	0.302	0.584	95.866	2.340	0.307	0.075	0.059	0.026	0.016	0.042	0	0	0	0
03/09/2002	1029	0.918	0.295	0.582	96.125	2.195	0.270	0.069	0.055	0.024	0.014	0.037	0	0	0	0
03/08/2002	1029	0.873	0.287	0.581	96.181	2.180	0.279	0.070	0.056	0.024	0.014	0.036	0	0	0	0
03/07/2002	1028	0.880	0.303	0.581	96.275	2.061	0.277	0.068	0.057	0.025	0.015	0.038	0	0	0	0
03/06/2002	1027	0.781	0.310	0.579	96.625	1.816	0.264	0.065	0.054	0.026	0.017	0.042	0	0	0	0
03/05/2002	1026	0.745	0.321	0.578	96.681	1.842	0.227	0.054	0.046	0.024	0.016	0.044	0	0	0	0
03/04/2002	1028	0.791	0.339	0.580	96.450	1.927	0.280	0.064	0.054	0.029	0.020	0.047	0	0	0	0

Deliverer

August 11, 2001

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 8-06-01
Specific Gravity, 60 °F	ASTM D 4052	Report	0.8525
API, 60 °F		Min 28.0, Max 40.0	34.5
Kinematic Viscosity, 100 °F	ASTM D 445		
cSt		Min 1.8, Max 5.8	2.83
SUS		Max 40	35.4
Flash Point, °F	ASTM D 93	Min 100	159
Pour Point, °C	ASTM D 97	Max 20	-21
Sulfur, mass %	ASTM D 2622	Max 0.050	0.0382
Nitrogen, mass %	ASTM D4629	Max 0.03	0.0137
Distillation, °F			
IBP	ASTM D 86		371.1
5%			398.2
10%			424.4
15%			437.2
20%			449.4
30%			473.0
40%			495.7
50%			515.8
60%			537.2
70%			559.4
80%			585.2
90%		Max 650	619.6
95%			647.1
FBP			665.8
Recovery			97.1
Loss, vol%			1.8
Residue, vol%			1.1
Sediment, mass %	ASTM D 473	Max 0.1	0.01
Water, %	ASTM D 95	Max 0.1	<0.05
Ash, %	ASTM D482	Max 0.0003	<0.0003
Net Heat of Combustion	ASTM D 240		18318.5.0 Btu/lb
MMBTU/Barrel		Min 5.9	5.5
Hydrogen Content, wt %	ASTM D 3701	Min 12.0	13.03
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.09
10% Bottoms		Max 0.25	0.09
Particulate Contamination			
Filterable Dirt (mg/100 mL)			0.04
Silica Content, wt %			<0.01
Algae Growth			Not detected

(OMTWAHJISWGO) page 2 of 2

ATTACHMENT EU04-03

COMPLIANCE TEST REPORT

Sam O. Purdom Generating Station
July 1, 2002

EPA
VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One): Method 9 | 203A | 203B | Other: _____

Form Number: P C T 2 1 | Page 1 of 2

Continued on VEO Form Number: P C T 2 2

Name: City of Tallahassee

Name: Sam O. Purdom Generating Station

Street Address: 667 Port Leon Drive

City: St. Mark's | State: FL. | Zip: 32355

Process: Combustion Turbine - Oil Fired | Unit #: -009 | Operating Mode: 168 mmBTU/hr. LHV

Control Equipment: none | Operating Mode: n/a

Describe Emission Point: Round metal stack located on east side of combustion turbine building.

Height of Emiss. Pt.: Start ~38' End ~38' | Height of Emiss. Pt. Rel. to Observer: Start ~42' End ~42'

Distance to Emiss. Pt.: Start ~150' End ~150' | Direction to Emiss. Pt. (Degrees): Start 239° End 239°

Vertical Angle to Obs. Pt.: Start 17° End 17° | Direction to Obs. Pt. (Degrees): Start 239° End 239°

Distance and Direction to Observation Point from Emission Point: Start 1' above stack End 1' above stack

Describe Emissions: Start coning End coning

Emission Color: Start black End black | Water Droplet Plume: Attached ☐ Detached ☐ None ☒

Describe Plume Background: Start SKY End SKY

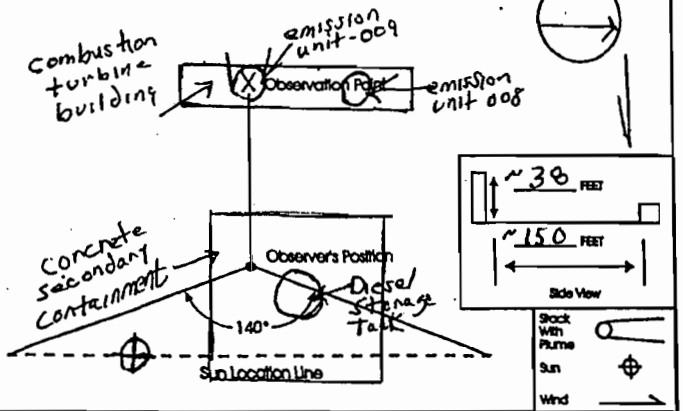
Background Color: Start blue End blue | Sky Conditions: Start clear End clear

Wind Speed: Start 2-4 End 2-4 | Wind Direction: Start E End E

Ambient Temp.: Start 91 End 92 | Wet Bulb Temp.: 79 | RH Percent: 59

Source Layout Sketch

Draw North Arrow: ☐ TN ☒ MN



Longitude: 84° 12' 10" W | Latitude: 30° 09' 47" N | Declination: -3°

Additional Information: Permit No. 1290001-003-AV

Observation Date	Time Zone	Start Time	End Time
6-14-02	EST	10:40	11:39

Sec / Min	0	15	30	45	Comments
1	5	5	5	5	
2	5	5	5	5	
3	5	5	5	5	
4	5	5	5	5	
5	5	5	5	5	
6	5	5	5	5	
7	5	5	5	5	
8	5	5	5	5	
9	5	5	5	5	
10	5	5	5	5	
11	5	5	5	5	
12	5	5	5	5	
13	5	5	5	5	
14	5	5	5	5	
15	5	5	5	5	
16	5	5	5	5	
17	5	5	5	5	
18	5	5	5	5	
19	5	5	5	5	
20	5	5	5	5	
21	5	5	5	5	
22	5	5	5	5	
23	5	5	5	5	
24	5	5	5	5	
25	5	5	5	5	
26	5	5	5	5	
27	5	5	5	5	
28	5	5	5	5	
29	5	5	5	5	
30	5	5	5	5	

Observer's Name (Print): Hal Avery

Observer's Signature: Hal Avery | Date: 6-14-02

Organization: City of Tallahassee

Certified By: ETA | Date: 2-20-02

VEO Form 1

EPA
ISIBLE EMISSION OBSERVATION FORM 1

Form Number	P	C	T	2	2	Page 2 of 2
Continued on VEO Form Number						

Method Used (Circle One): (Method 9) 203A 203B Other: _____

Company Name: City of Tallahassee			
Plant Name: Sam O. Purdom Generating Station			
Street Address: 647 Port Leon Drive			
City: St. Marks	State: FL	Zip: 32355	

Process	Unit #	Operating Mode
Control Equipment		Operating Mode

Describe Emission Point:

Height of Emiss. Pt.		Height of Emiss. Pt. Rel. to Observer	
Start	End	Start	End
Distance to Emiss. Pt.		Direction to Emiss. Pt. (Degrees)	
Start	End	Start	End

Vertical Angle to Obs. Pt.		Direction to Obs. Pt. (Degrees)	
Start	End	Start	End

Distance and Direction to Observation Point from Emission Point:
Start _____ End _____

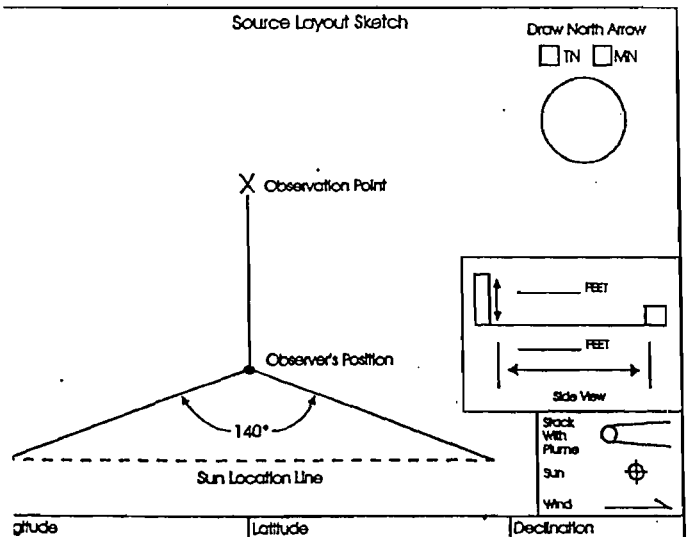
Describe Emissions:
Start _____ End _____

Emission Color		Water Droplet Plume	
Start	End	Attached ☐	Detached ☐ None ☐

Describe Background:
End _____

Background Color		Sky Conditions	
Start	End	Start	End
Wind Speed		Wind Direction	
Start	End	Start	End
Ambient Temp.		Wet Bulb Temp.	RH Percent
Start	End		

Source Layout Sketch



Longitude	Latitude	Declination

Permit Information
Permit No. 1290001-003-AV

Observation Date	Time Zone	Start Time	End Time
6-14-02	EST	10:40	11:39

Sec / Min	0	15	30	45	Comments
1	5	5	5	5	
2	5	5	5	5	
3	5	5	5	5	
4	5	5	5	5	
5	5	5	5	5	
6	5	5	5	5	
7	5	5	5	5	
8	5	5	5	5	
9	5	5	5	5	
10	5	5	5	5	
11	5	5	5	5	
12	5	5	5	5	
13	5	5	5	5	
14	5	5	5	5	
15	5	5	5	5	
16	5	5	5	5	
17	5	5	5	5	
18	5	5	5	5	
19	5	5	5	5	
20	5	5	5	5	
21	5	5	5	5	
22	5	5	5	5	
23	5	5	5	5	
24	5	5	5	5	
25	5	5	5	5	
26	5	5	5	5	
27	5	5	5	5	
28	5	5	5	5	
29	5	5	5	5	
30	5	5	5	5	

Observer's Name (Print)	Hal Avery	
Observer's Signature	Hal Avery	Date 6-14-02
Organization	City of Tallahassee	
Certified By	ETA	Date 2-20-02

OF 1.1

VISIBLE EMISSIONS EVALUATOR

This is to certify that

Hal Avery

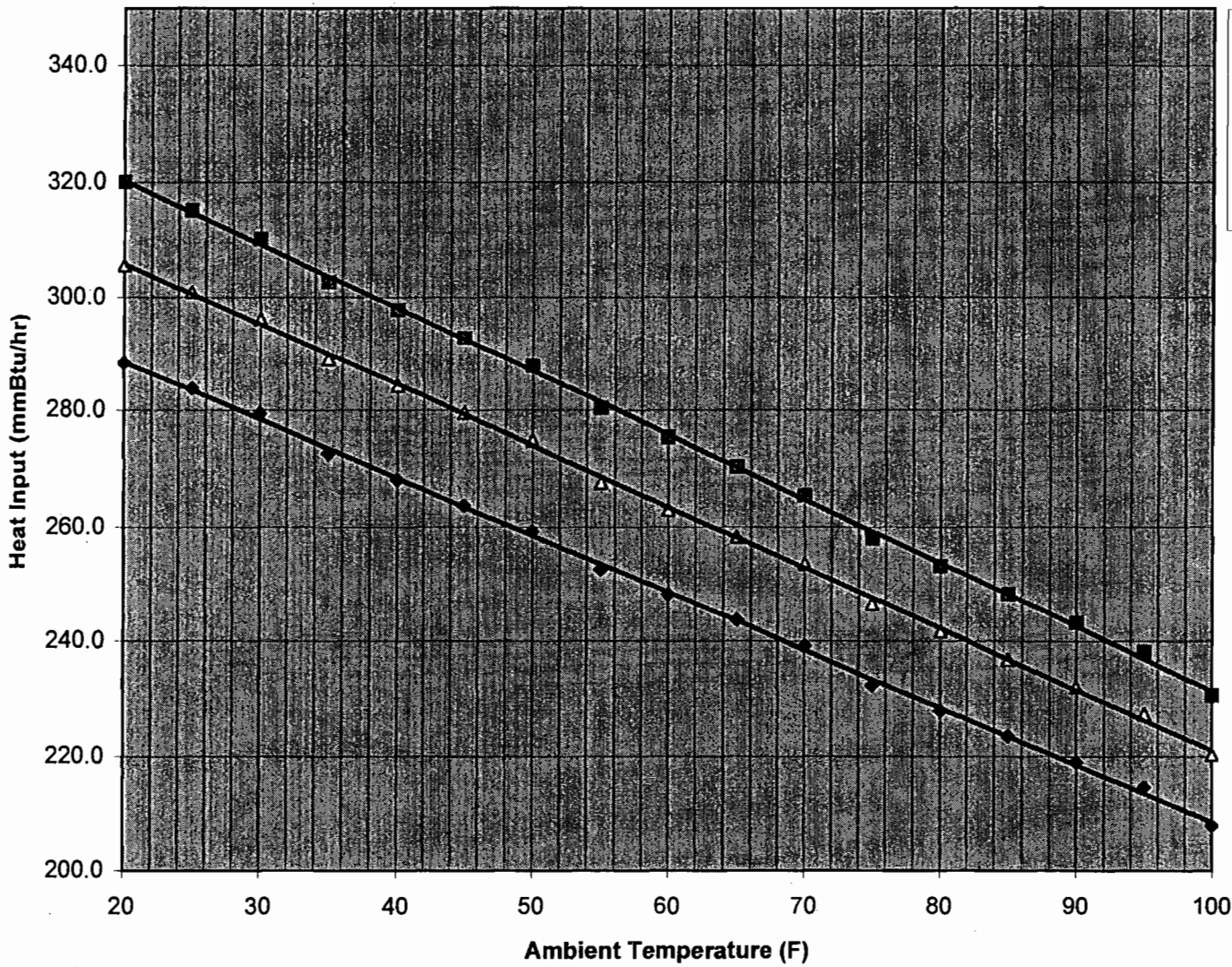
met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

292581	*Tampa, Florida*	*February 20, 2002*
Certificate Number	Location	Date of Issue

Thomas Hoze
President

Michael W. Lunsford
Director of Training

Purdom GT Heat Input Limit (mmBtu/hr)



◆ Heat Input Limit (mmBtu/hr - LHV)

■ Natural Gas Heat Input Limit (mmBtu/hr - HHV)

△ No. 2 Fuel Oil Heat Input Limit (mmBtu/hr - HHV)

NOTES:

- Applied Westinghouse recommended HHV:LHV ratio of 1.11 for natural gas and 1.06 for diesel
- Assumed the permitted heat input limit (228 mmBtu/hr LHV@80F) is corrected for elevation (sea level) and barometric pressure.

ATTACHMENT EU04-04

PROCEDURES FOR STARTUP AND SHUTDOWN

Sam O. Purdom Generating Station
July 1, 2002

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the gas turbines at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the gas turbines. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU04-05

ALTERNATIVE METHODS OF OPERATION

Sam O. Purdom Generating Station
July 1, 2002

Alternative Methods of Operation

Combustion Turbine No. 2 (EU04) is used as a peaking and emergency reserve unit. It is fueled by natural gas or No. 2 fuel oil. The alternative methods of operation (AMO) associated with the combustion turbine are related to the type of fuel being fired and rate of operation. The combustion turbine has a nominal production capacity of 12.3 MW. The current AMOs include the following:

- Natural Gas Firing - Maximum Rate of 228 mmBtu/hr (LHV)
- No. 2 Fuel Oil Firing - Maximum Rate of 228 mmBtu/hr (LHV)

Note: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

ATTACHMENT EU04-06

ADDITIONAL APPLICABLE REQUIREMENTS

Sam O. Purdom Generating Station
July 1, 2002

Additional Applicable Requirements

The City of Tallahassee requests the following revisions to be incorporated into the Title V Operating Permit:

D.13. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at permitted capacity, which is defined as ~~95~~ 90 – 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and ~~105~~ 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Rule 62-297.310(2), F.A.C. ~~A065-242827 Specific Condition No. 2; and, Applicant Request dated June 24, 1997~~.]

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

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

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Boiler No. 7

4. Emissions Unit Identification Number:
[ ] No ID ID: **007** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**≈ 1966**	**49**	**[X]**

9. Emissions Unit Comment: (Limit to 500 Characters)

The maximum allowable heat input is 621 mmBtu/hr (higher heating value). The emissions unit will be subject to the facility-wide cap on SO_2 and NOx.

Emissions Unit Control Equipment

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

   N/A

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

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Riley Stoker Corporation**
   Model Number: **RX-33**

2. Generator Nameplate Rating: **44** MW (nominal)

3. Incinerator Information: **N/A**

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: **621** mmBtu/hr
2. Maximum Incineration Rate: **N/A** lb/hr tons/day
3. Maximum Process or Throughput Rate: **N/A**
4. Maximum Production Rate: **N/A**
5. Requested Maximum Operating Schedule:

   24 hours/day **7** days/week

   52 weeks/year **8,760** hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):

   Annual operation is limited by the facility-wide emission caps on SO_2 and NOx.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Rule 62-210.700(1),(2),(3),(4),(6) F.A.C	40 CFR 72.23
Rule 62-214.300 F.A.C.	40 CFR 72.30(a),(c),(d)
Rule 62-214.350(2),(3),(5),(6) F.A.C	40 CFR 72.32
Rule 62-214.430(1) F.A.C.	40 CFR 72.40(a),(c),(d)
Rule 62-296.405(1)(a),(b),(c)1h F.A.C.	40 CFR 72.51
Rule 62-296.405(1)(f)1b;(e)1,2,3;(f)1a(i)	40 CFR 72.90
Rule 62-297.310(1) F.A.C.	40 CFR 73.33(c)(d)(e)
Rule 62-297.310(2)(b) F.A.C.	40 CFR 73.35(c)
Rule 62-297.310(3) F.A.C.	40 CFR 75.4
Rule 62-297.310(4) F.A.C.	40 CFR 75.5
Rule 62-297.310(5) F.A.C.	40 CFR 75.10(a)(1),(2),(3)(ii),(b)-(d),(f),(g)
Rule 62-297.310(6)(a),(c)-(g) F.A.C.	40 CFR 75.11(d)(2)
Rule 62-297.310(7)(a)2,3,4,5,9,(c) F.A.C.	40 CFR 75.12(a),(b)
Rule 62-297.310(8) F.A.C.	40 CFR 75.13(a),(b)
40 CFR 72.9(a),(b),(c)(1)-(3)(iii),(e)-(g)	40 CFR 75.14(c)
40 CFR 72.20(a)-(c)	40 CFR 75.20 (except (e),(f),(h))
40 CFR 72.21	40 CFR 75.21(a),(c)
40 CFR 72.22	Rule 62-204.800(15),(16) F.A.C.
40 CFR 75.22	40 CFR 75.64

40 CFR 75.24	40 CFR 75, Appendix A
40 CFR 75.30(a)(3),(d)(2)	40 CFR 75, Appendix B
40 CFR 75.31	40 CFR 75, Appendix C
40 CFR 75.32	40 CFR 75, Appendix D
40 CFR 75.33(a),(c)	40 CFR 75, Appendix G 2,4
40 CFR 75.53	40 CFR 75, Appendix H (reserved)
40 CFR 75.54 [except (d),(f)]	40 CFR 77.3
40 CFR 75.58(c)	40 CFR 77.5(b)
40 CFR 75.59	40 CFR 77.6
40 CFR 75.60	40 CFR 72.31
40 CFR 75.61	40 CFR 75.36
40 CFR 75.62	
40 CFR 75.63	
40 CFR 75.35	

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? **EU11**		2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This emission point represents the exhaust for Boiler No. 7**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **180** feet	7. Exit Diameter: **9.0** feet
8. Exit Temperature: **300** °F	9. Actual Volumetric Flow Rate: **180,798** acfm	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**	
13. Emission Point UTM Coordinates: Zone: **16** East (km): **769.653** North (km): **3339.883**		
14. Emission Point Comment (limit to 200 characters): **Values in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

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

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
Natural Gas		
2. Source Classification Code (SCC):	3. SCC Units:	
10100601	**mmSCF**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
0.597	**See Field 10**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
*	**N/A**	**1040 (gross calorific value)**
10. Segment Comment (limit to 200 characters):		
***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.** **The value in Field 9 is an estimate subject to fluctuation.** **Maximum Annual Rates can vary based on facility-wide SO_2 and NOx caps and actual emissions.**		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
Fuel Oil Nos. 2 through 6		
2. Source Classification Code (SCC):	3. SCC Units:	
10100401, 10100405, 10100501, and 10100504	**1000 Gallons**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
4140	**See Field 10**	**N/A**

7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
1.70*	**N/A**	**150 (gross calorific value)**

10. Segment Comment (limit to 200 characters):

Maximum Annual Rates can vary based on facility-wide SO_2 and NOx caps and actual emissions.

***Maximum sulfur content will vary based on the fuel's higher heating value and density.**

Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters):

On-Spec Used Oil

2. Source Classification Code (SCC):	3. SCC Units:
10101302	**1000 Gallons**

4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
4140	**See Field 10**	**N/A**

7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
1.70*	**N/A**	**150 (gross calorific value)**

10. Segment Comment (limit to 200 characters):

Maximum Annual Rate can vary based on facility-wide SO_2 and NOx caps and actual emissions.

***Maximum sulfur content will vary based on the fuel's higher heating value and density.**

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Any mixture of Natural Gas, Fuel Oil Nos. 2 through 6, or On-Spec Used Oil**		
2. Source Classification Code (SCC): **See Field 10**	3. SCC Units: **KGallons / mmSCF (See also Field 10)**	
4. Maximum Hourly Rate: **4140 / 0.597 (See also Field 10)**	5. Maximum Annual Rate: **See Field 10**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **1.70 / * (See also Field 10)**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **0.150 / 1040 (HHV) (See also Field 10)**

10. Segment Comment (limit to 200 characters):

See information previously provided in this application for each individual segment.

***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.**

The values in Field 9 are estimates subject to fluctuation.

Maximum Annual Rates can vary based on facility-wide caps and actual emissions. The purpose of this segment is to indicate the potential to co-fire multiple fuels. In order to provide the maximum hourly rates for the co-firing of a liquid and gaseous fuel, the maximum of each fuel is provided.

Maximum sulfur content will vary based on the fuel's higher heating value and density.

Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			**NS**
NOx			**EL**
PM			**EL**
PM_{10}			**NS**
SO_2			**EL**
HAPS			**NS**

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

Potential/Fugitive Emissions: Pollutant Detail Information 1 of 3

1. Pollutant Emitted: **SO^2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **1.2 x10^3** lb/hour **80 (Cap)** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **1.87 lb/mmBtu** Reference: **62-296.405(1)(c) F.A.C.**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **Allowable Emission Rate: 1.87 lb/mmBtu** **Maximum Heat Input Rate: 621 mmBtu/hr** **lb/hr = (1.87 lb/mmBtu) x (621 mmBtu/hr) = 1.2 x 10^3 lb/hr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **The current maximum allowable emission rate is 1.87 lb/mmBtu and the maximum heat input rate is 621 mmBtu/hr. Current allowable SO_2 emissions are subject to an annual emissions cap of 80 TPY.**	

Allowable Emissions

A.

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
Rule	**N/A**
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
1.87 lb/mmBtu	**1.2×10^3** lb/hour **80 (Cap)** tons/year
5. Method of Compliance (limit to 60 characters):	
Compliance will be based on unit specific fuel usage logs and vendor fuel data	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	
Emissions limitation entered in Field 3 reflects the maximum allowable emission rate per the SIP regulations (62-296.405(1)(c)1,h F.A.C.)	

Allowable Emissions

B.

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
ESCPSD	**N/A**
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
80 TPY	**N/A**
5. Method of Compliance (limit to 60 characters): **40 CFR Part 75, Appendix D**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	
Annual emissions will be limited by the annual facility-wide cap for SO_2 emissions of 80 TPY.	

Emissions Unit Information Section 5 of 7

Potential/Fugitive Emissions: Pollutant Detail Information 2 of 3

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
PM	**N/A**

3. Potential Emissions:	4. Synthetically Limited?
77.6 lb/hour **Related to SO_2 and NOx Caps** tons/year	**[X]**

5. Range of Estimated Fugitive Emissions: **N/A**
[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor:	7. Emissions Method Code:
0.1 lb/mmBtu (0.3 lb/mmBtu during boiler cleaning & load change) Reference: **62-296.405(1)(b) and 62-210.700 F.A.C.**	**0**

8. Calculation of Emissions (limit to 600 characters):

Allowable Emission Rate: 0.1 lb/mmBtu and 0.3 lb/mmBtu
Maximum Heat Input Rate: 621 mmBtu/hr

A PM emission rate of 0.3 lb/mmBtu is allowed for 3 hr in a 24 hr period, or 12.5% of the time.

lb/hr = (1 - 0.125) x (621mmBtu/hr x 0.1 lb/mmBtu) + (0.125) x (621 mmBtu/hr x 0.3 lb/mmBtu)

lb/hr = 77.6

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

The maximum allowable emission rate is 0.1 lb/mmBtu and 0.3 lb/mmBtu during excess emissions for load changes and boiler cleaning.

The maximum heat input rate is 621 mmBtu/hr. Potential PM emissions are estimated utilizing these allowable rates. The annual emissions are limited indirectly by the facility wide emission caps on SO_2 and NOx

Emissions Unit Information Section 5 of 7

Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
Rule	**N/A**
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.1 lb/mmBtu and 0.3 lb/mmBtu during excess emissions when firing fuel oil	**77.6** lb/hour **Related to SO_2 and NOx Caps**

5. Method of Compliance (limit to 60 characters):

EPA Methods 1, 2, 3, 5, or 17 in any fiscal year in which the fossil fuel system generator burns more than 400 hours of fuel oil other than startup.

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

Emissions limitation entered in Field 3 reflects the maximum allowable emission rate per the SIP regulations (62-296.405(1)(b) and 62-210.700(3) F.A.C.)

Potential/Fugitive Emissions: Pollutant Detail Information 3 of 3

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
NOx	**N/A**
3. Potential Emissions:	4. Synthetically Limited?
204.93 lb/hour **NOx Cap** tons/year	**[X]**

5. Range of Estimated Fugitive Emissions: **N/A**
[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor:	7. Emissions Method Code:
Reference:	**3**

8. Calculation of Emissions (limit to 600 characters):

Maximum Firing Rate: 621 mmBtu/hr
Emission Factor: 0.33 lb/mmBtu (CEMS Data)

lb/hr = (621 mmBtu/hr) x (0.33 lb-NOx/mmBtu) = 204.93 lb/hr

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Potential emissions are capped by the requested facility-wide emissions limitation.

Allowable Emissions

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **467 TPY**	4. Equivalent Allowable Emissions: **204.93** lb/hour **NOx Cap** tons/year
5. Method of Compliance (limit to 60 characters): **40 CFR Part 75**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

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: **VE20**	2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **Annual VE in accordance with EPA Method 9 using the maximum fuel oil to gas ratio used during the fiscal year**	
5. Visible Emissions Comment (limit to 200 characters):	

Emissions Unit Information Section 5 of 7

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE60**	2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **60** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: ***See Field 5**	
4. Method of Compliance: **N/A**	
5. Visible Emissions Comment (limit to 200 characters): **In accordance with 62-210.700(1),(2),&(3) F.A.C., excess emissions are allowed at the following opacities for the associated time periods:** **60 % - 3 hrs / 24 hrs for boiler cleaning and load change** **100 % - 2 hrs / 24 hrs for malfunction** **100 % - unlimited for start-up and shutdown** **The City is also requesting relief for excess opacity when fuel switching or purging oil from fuel oil burners. Purging occurs whenever a burner is removed from service.**	

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

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: **Flow**	2. Pollutant(s): **Gas Fuel Flow**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Superior** Model Number: **GHFA 8" 600 RF** Serial Number: **94128**	
5. Installation Date: **12-31-94**	6. Performance Specification Test Date: **12-31-94**
7. Continuous Monitor Comment (limit to 200 characters): **Orifice Meter: Installed in accordance with Rule 62-214.320 and Rule 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1**	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: **Flow**	2. Pollutant(s): **Oil Fuel Flow Monitor (2)**
3. CMS Requirement: [**X**] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Micro Motion & EXAC** Model Numbers: **CMF200M342NU & EX1200A, respectively** Serial Numbers: **319657 & 9210S0005062, respectively**	
5. Installation Date: **12-21-94 & 12-16-94**	6. Performance Specification Test Date: **12-21-94 & 12-16-94**
7. Continuous Monitor Comment (limit to 200 characters): **Coriolis Type Meter: Installed in accordance with Rule 62-214.320 and 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1** **The serial number reflects the primary unit.**	

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement: [**X**] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Teco** Model Number: **42C** Serial Number: **42C-69073-362**	
5. Installation Date: **8-7-01**	6. Performance Specification Test Date: **8-22-01 (certification date)**
7. Continuous Monitor Comment (limit to 200 characters): **Installed in accordance with Rule 62-214.320 and 62-214.330, F.A.C. , and 40 CFR Part 75**	

Emissions Unit Information Section 5 of 7

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: **CO_2**	2. Pollutant(s): **Carbon Dioxide**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Teco** Model Number: **41C**	Serial Number: **41CHL-68207-359**
5. Installation Date: **8-7-01**	6. Performance Specification Test Date: **8-22-01 (certification date)**
7. Continuous Monitor Comment (limit to 200 characters): **Installed in accordance with Rule 62-214.320 and 62-214.330, F.A.C., and 40 CFR Part 75** **Note: The serial number reflects the primary unit.**	

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

Supplemental Requirements

1. Process Flow Diagram [**X**] Attached, Document ID: **EU11-01** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU11-02** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [**X**] Attached, Document ID: **EU11-03** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [**X**] Previously submitted, Date: **November 9, 2000** [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU11-04** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [**X**] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU11-05** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU11-06** [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[**X**] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **EU11-07**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

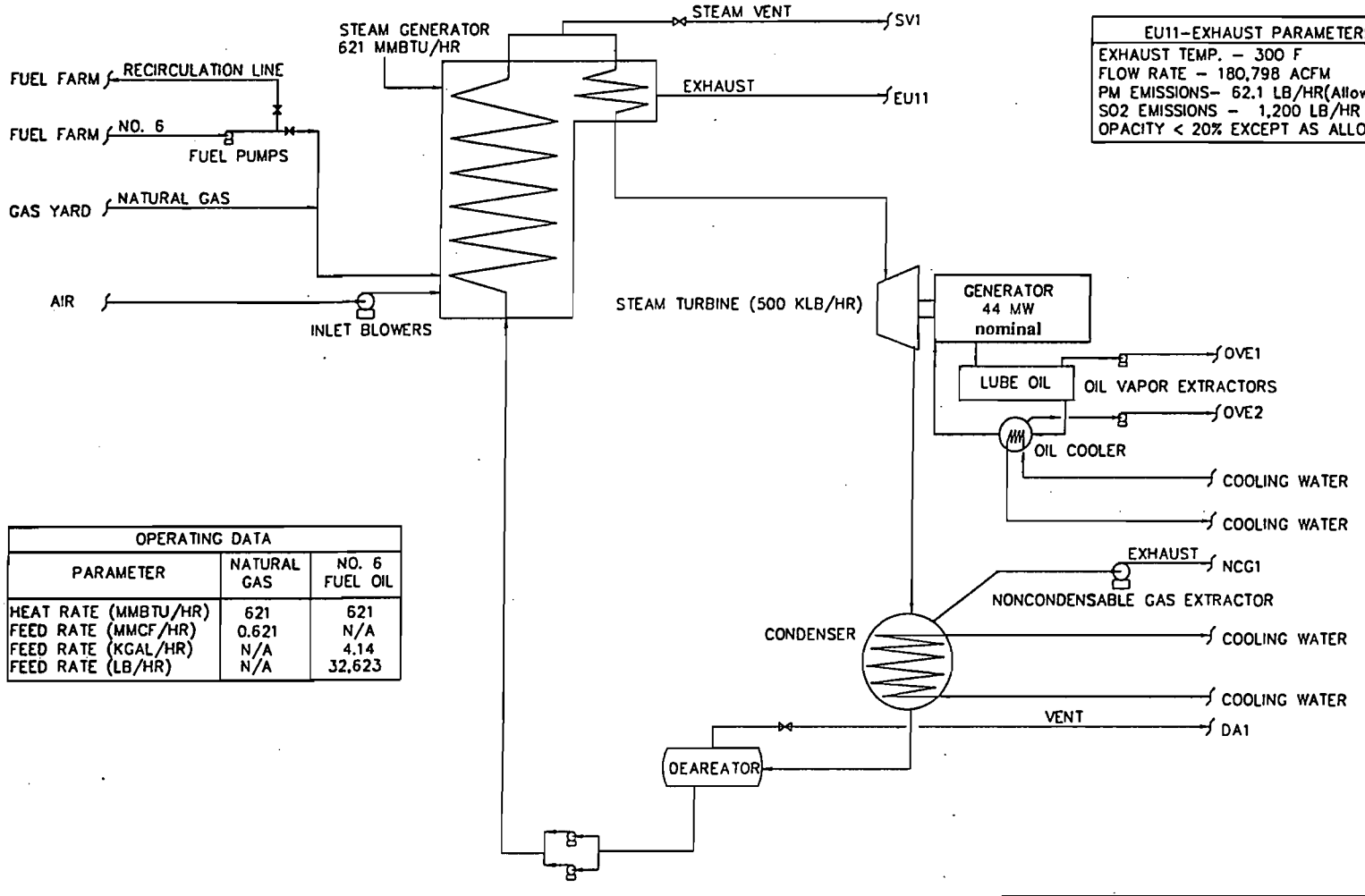
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT EU11-01

PROCESS FLOW DIAGRAM

Sam O. Purdom Generating Station
July 1, 2002



EU11-EXHAUST PARAMETERS
EXHAUST TEMP. – 300 F
FLOW RATE – 180,798 ACFM
PM EMISSIONS– 62.1 LB/HR(Allowable)
SO2 EMISSIONS – 1,200 LB/HR
OPACITY < 20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 6 FUEL OIL
HEAT RATE (MMBTU/HR)	621	621
FEED RATE (MMCF/HR)	0.621	N/A
FEED RATE (KGAL/HR)	N/A	4.14
FEED RATE (LB/HR)	N/A	32,623

CITY OF TALLAHASSEE, FLORIDA
TITLE V PERMIT APPLICATION
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
STEAM GENERATOR NO. 7

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 3/15/95	BY: DJG CKD' BY: DF REV. BY:	CAD FILE NO. PSG7.DWG FIGURE NO. EU11-02

ATTACHMENT EU11-02

FUEL ANALYSIS

Sam O. Purdom Generating Station
July 1, 2002

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU-11, Boiler No. 7. Maximum values may be higher. The fuels represented in the analyses include natural gas, fuel oil, and on-spec used oil.

FGT

st Updated 5/28/02 7:56

Station Name	Total Sulfur Previous Day Avg ppm 05/26/02	Total Sulfur Previous Day Avg Grains/hcf 05/26/02
Perry 36" Stream #1	2.1	0.132
Perry 30" Stream #2	2.9	0.184
Perry 24" Stream #3	3.3	0.206
Brooker 24" Stream	3.0	0.187

Florida Gas makes no warranty or representation whatsoever as to the accuracy of th
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30' Stream #: Avg Grains/l
05/25/02	33	2.128	0.133	3.668	0.229
05/24/02	32	2.366	0.148	4.319	0.270
05/23/02	31	3.001	0.188	4.979	0.311
05/22/02	30	3.906	0.244	4.767	0.298
05/21/02	29	4.803	0.300	4.542	0.284
05/20/02	28	3.510	0.219	4.099	0.256
05/19/02	27	3.311	0.207	3.865	0.242
05/18/02	26	3.893	0.243	5.044	0.315
05/17/02	25	2.135	0.133	2.128	0.133
05/16/02	24	1.986	0.124	1.757	0.110
05/15/02	23	2.757	0.172	2.019	0.126
05/14/02	22	2.210	0.138	1.694	0.106
05/13/02	21	1.901	0.119	1.844	0.115
05/12/02	20	1.827	0.114	1.536	0.096
05/11/02	19	1.820	0.114	1.292	0.081
05/10/02	18	1.848	0.115	1.409	0.088
05/09/02	17	1.656	0.104	1.365	0.085
05/08/02	16	1.871	0.117	1.570	0.098
05/07/02	15	2.676	0.167	2.158	0.135
05/06/02	14	2.819	0.176	2.233	0.140
05/05/02	13	2.428	0.152	1.901	0.119
05/04/02	12	3.045	0.190	2.126	0.133
05/03/02	11	2.941	0.184	2.316	0.145
05/02/02	10	2.381	0.149	2.045	0.128
05/01/02	9	1.863	0.116	1.625	0.102
04/30/02	8	1.648	0.103	1.374	0.086
04/29/02	7	1.746	0.109	1.343	0.084
04/28/02	6	1.709	0.107	1.387	0.087
04/27/02	5	1.640	0.103	1.389	0.087
04/26/02	4	1.957	0.122	2.094	0.131
04/25/02	3	2.698	0.169	3.010	0.188
04/24/02	2	2.592	0.162	2.300	0.144
04/23/02	1	2.344	0.146	2.306	0.144

\\otsntapp4\ets_users\fgt\fgtscada.txt

daily chromatograph

date requested: Jun 4 2002 1:07PM

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

Chromatograph Report For: 8030 - PERRY STREAM #1

download

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
06/04/2002	1037	0.884	0.301	0.587	95.498	2.578	0.444	0.104	0.093	0.031	0.018	0.049	0	0	0	0
06/03/2002	1036	0.922	0.311	0.587	95.513	2.523	0.434	0.104	0.090	0.032	0.019	0.052	0	0	0	0
06/02/2002	1032	0.851	0.326	0.583	96.138	1.994	0.403	0.101	0.086	0.031	0.018	0.052	0	0	0	0
06/01/2002	1033	0.868	0.365	0.584	95.974	2.044	0.436	0.111	0.094	0.034	0.020	0.054	0	0	0	0
05/31/2002	1033	0.886	0.365	0.585	95.942	2.052	0.438	0.114	0.095	0.035	0.020	0.053	0	0	0	0
05/30/2002	1031	0.851	0.332	0.583	96.229	1.897	0.394	0.103	0.089	0.033	0.019	0.053	0	0	0	0
05/29/2002	1031	0.816	0.327	0.582	96.254	1.922	0.391	0.100	0.082	0.034	0.020	0.055	0	0	0	0
05/28/2002	1032	0.827	0.322	0.583	96.210	1.954	0.408	0.101	0.081	0.030	0.018	0.050	0	0	0	0
05/27/2002	1031	0.844	0.332	0.583	96.175	1.984	0.401	0.095	0.077	0.028	0.017	0.047	0	0	0	0
05/26/2002	1033	0.829	0.315	0.584	96.067	2.059	0.438	0.106	0.086	0.031	0.018	0.051	0	0	0	0
05/25/2002	1034	0.863	0.304	0.584	95.968	2.114	0.443	0.110	0.093	0.033	0.019	0.053	0	0	0	0
05/24/2002	1034	0.856	0.291	0.584	96.013	2.075	0.450	0.112	0.095	0.034	0.020	0.055	0	0	0	0
05/23/2002	1038	0.980	0.277	0.589	95.554	2.244	0.551	0.149	0.116	0.044	0.024	0.062	0	0	0	0
05/22/2002	1041	0.960	0.279	0.590	95.302	2.428	0.612	0.164	0.128	0.046	0.024	0.058	0	0	0	0
05/21/2002	1042	0.891	0.281	0.590	95.359	2.436	0.617	0.161	0.131	0.044	0.023	0.057	0	0	0	0
05/20/2002	1045	0.927	0.301	0.593	94.953	2.674	0.682	0.179	0.146	0.049	0.026	0.063	0	0	0	0
05/19/2002	1043	0.953	0.289	0.592	95.082	2.558	0.665	0.174	0.143	0.048	0.025	0.062	0	0	0	0
05/18/2002	1043	0.929	0.287	0.591	95.131	2.574	0.641	0.166	0.136	0.047	0.025	0.063	0	0	0	0
05/17/2002	1052	0.978	0.294	0.598	94.364	2.955	0.847	0.224	0.179	0.060	0.031	0.070	0	0	0	0
05/16/2002	1048	0.942	0.295	0.594	94.712	2.800	0.758	0.197	0.157	0.052	0.026	0.061	0	0	0	0
05/15/2002	1041	0.864	0.297	0.589	95.287	2.586	0.587	0.143	0.119	0.039	0.022	0.054	0	0	0	0
05/14/2002	1045	0.902	0.298	0.592	94.942	2.718	0.687	0.178	0.144	0.048	0.025	0.058	0	0	0	0
05/13/2002	1044	0.900	0.280	0.591	95.095	2.631	0.657	0.171	0.136	0.047	0.025	0.057	0	0	0	0
05/12/2002	1044	0.905	0.270	0.591	95.121	2.620	0.647	0.169	0.134	0.048	0.026	0.062	0	0	0	0
05/11/2002	1044	0.867	0.280	0.591	95.082	2.736	0.625	0.156	0.127	0.044	0.024	0.058	0	0	0	0
05/10/2002	1047	0.887	0.283	0.593	94.822	2.883	0.679	0.171	0.140	0.048	0.026	0.061	0	0	0	0
05/09/2002	1046	0.889	0.276	0.592	94.963	2.764	0.665	0.170	0.138	0.048	0.026	0.062	0	0	0	0
05/08/2002	1044	0.873	0.281	0.591	95.133	2.659	0.629	0.163	0.130	0.046	0.025	0.061	0	0	0	0
05/07/2002	1042	0.851	0.286	0.589	95.361	2.522	0.578	0.150	0.121	0.044	0.025	0.062	0	0	0	0
05/06/2002	1043	0.877	0.288	0.591	95.168	2.632	0.612	0.160	0.127	0.047	0.026	0.063	0	0	0	0
05/05/2002	1044	0.891	0.298	0.591	95.041	2.764	0.602	0.154	0.121	0.045	0.025	0.059	0	0	0	0
05/04/2002	1039	0.901	0.303	0.588	95.326	2.682	0.473	0.109	0.088	0.037	0.023	0.058	0	0	0	0
05/03/2002	1033	0.958	0.313	0.586	95.605	2.478	0.394	0.088	0.071	0.030	0.018	0.044	0	0	0	0
05/02/2002	1030	0.877	0.294	0.582	96.274	1.957	0.352	0.088	0.071	0.029	0.017	0.041	0	0	0	0
05/01/2002	1029	0.902	0.287	0.582	96.304	1.926	0.345	0.089	0.070	0.027	0.016	0.035	0	0	0	0
04/30/2002	1028	0.895	0.284	0.581	96.362	1.880	0.344	0.087	0.070	0.027	0.015	0.035	0	0	0	0
04/29/2002	1029	0.887	0.291	0.581	96.335	1.900	0.346	0.088	0.074	0.027	0.016	0.037	0	0	0	0
04/28/2002	1029	0.903	0.291	0.582	96.319	1.873	0.362	0.094	0.077	0.028	0.016	0.036	0	0	0	0
04/27/2002	1030	0.917	0.290	0.583	96.176	1.982	0.373	0.097	0.079	0.029	0.017	0.039	0	0	0	0
04/26/2002	1031	0.930	0.282	0.583	96.082	2.068	0.374	0.097	0.078	0.030	0.018	0.041	0	0	0	0
04/25/2002	1030	0.913	0.282	0.583	96.129	2.074	0.357	0.092	0.075	0.027	0.016	0.035	0	0	0	0
04/24/2002	1028	0.872	0.288	0.581	96.387	1.900	0.329	0.085	0.066	0.025	0.014	0.034	0	0	0	0
04/23/2002	1030	0.901	0.278	0.582	96.183	2.045	0.353	0.090	0.074	0.026	0.015	0.035	0	0	0	0
04/22/2002	1030	0.903	0.279	0.582	96.158	2.053	0.359	0.093	0.076	0.028	0.016	0.035	0	0	0	0
04/21/2002	1029	0.921	0.280	0.582	96.221	1.993	0.348	0.091	0.070	0.026	0.015	0.035	0	0	0	0
04/20/2002	1029	0.927	0.274	0.582	96.236	1.976	0.352	0.091	0.071	0.026	0.015	0.033	0	0	0	0

04/19/2002	1029	0.923	0.281	0.582	96.218	1.994	0.344	0.088	0.070	0.027	0.017	0.038	0	0	0	0
04/18/2002	1029	0.930	0.280	0.582	96.260	1.956	0.339	0.087	0.068	0.027	0.016	0.036	0	0	0	0
04/17/2002	1029	0.869	0.295	0.582	96.293	1.957	0.342	0.088	0.070	0.028	0.017	0.042	0	0	0	0
04/16/2002	1034	0.922	0.290	0.586	95.788	2.236	0.455	0.119	0.093	0.034	0.019	0.044	0	0	0	0
04/15/2002	1029	0.923	0.291	0.582	96.206	1.976	0.357	0.092	0.073	0.028	0.016	0.037	0	0	0	0
04/14/2002	1028	0.911	0.291	0.581	96.318	1.921	0.329	0.085	0.067	0.026	0.016	0.036	0	0	0	0
04/13/2002	1027	0.916	0.287	0.581	96.366	1.926	0.299	0.076	0.060	0.023	0.014	0.032	0	0	0	0
04/12/2002	1027	0.929	0.296	0.581	96.310	1.948	0.304	0.077	0.061	0.025	0.015	0.036	0	0	0	0
04/11/2002	1028	0.933	0.302	0.582	96.216	1.980	0.337	0.084	0.066	0.027	0.016	0.039	0	0	0	0
04/10/2002	1031	0.908	0.307	0.583	96.054	2.116	0.359	0.091	0.071	0.030	0.019	0.045	0	0	0	0
04/09/2002	1029	0.860	0.304	0.581	96.273	1.997	0.331	0.083	0.064	0.028	0.017	0.042	0	0	0	0
04/08/2002	1028	0.858	0.306	0.580	96.425	1.874	0.317	0.082	0.063	0.025	0.015	0.036	0	0	0	0
04/07/2002	1033	0.894	0.311	0.584	95.964	2.132	0.413	0.104	0.084	0.033	0.019	0.045	0	0	0	0
04/06/2002	1031	0.912	0.327	0.584	95.902	2.260	0.358	0.084	0.066	0.029	0.018	0.043	0	0	0	0
04/05/2002	1038	1.007	0.298	0.590	95.207	2.616	0.531	0.133	0.102	0.039	0.022	0.046	0	0	0	0
04/04/2002	1038	1.000	0.285	0.589	95.298	2.560	0.515	0.134	0.102	0.039	0.022	0.046	0	0	0	0
04/03/2002	1043	1.002	0.279	0.592	95.012	2.651	0.625	0.166	0.129	0.049	0.027	0.061	0	0	0	0
04/02/2002	1047	0.949	0.286	0.594	94.907	2.649	0.693	0.181	0.156	0.060	0.037	0.082	0	0	0	0
04/01/2002	1045	0.904	0.284	0.592	95.097	2.570	0.652	0.168	0.146	0.058	0.037	0.083	0	0	0	0
03/31/2002	1046	0.921	0.278	0.593	95.063	2.584	0.659	0.171	0.150	0.058	0.036	0.081	0	0	0	0
03/30/2002	1045	0.925	0.289	0.592	95.092	2.552	0.655	0.167	0.147	0.057	0.036	0.081	0	0	0	0
03/29/2002	1047	0.969	0.285	0.594	94.870	2.655	0.698	0.181	0.159	0.060	0.037	0.085	0	0	0	0
03/28/2002	1048	0.929	0.280	0.594	94.910	2.641	0.704	0.182	0.163	0.062	0.039	0.088	0	0	0	0
03/27/2002	1048	0.949	0.281	0.595	94.789	2.713	0.730	0.191	0.164	0.061	0.037	0.085	0	0	0	0
03/26/2002	1044	0.933	0.295	0.592	95.075	2.583	0.643	0.166	0.142	0.054	0.032	0.076	0	0	0	0
03/25/2002	1044	0.922	0.295	0.592	95.131	2.539	0.642	0.167	0.142	0.054	0.032	0.077	0	0	0	0
03/24/2002	1042	0.909	0.288	0.590	95.324	2.463	0.590	0.155	0.128	0.048	0.028	0.068	0	0	0	0
03/23/2002	1038	0.889	0.285	0.588	95.555	2.388	0.523	0.135	0.105	0.041	0.023	0.055	0	0	0	0
03/22/2002	1040	0.839	0.285	0.588	95.574	2.380	0.543	0.142	0.111	0.043	0.025	0.058	0	0	0	0
03/21/2002	1042	0.864	0.281	0.590	95.309	2.524	0.606	0.159	0.124	0.048	0.027	0.060	0	0	0	0
03/20/2002	1040	0.869	0.285	0.588	95.462	2.487	0.530	0.135	0.105	0.043	0.026	0.057	0	0	0	0
03/19/2002	1033	0.919	0.287	0.584	95.757	2.448	0.353	0.083	0.064	0.029	0.019	0.040	0	0	0	0
03/18/2002	1032	0.910	0.282	0.584	95.835	2.400	0.337	0.082	0.065	0.030	0.019	0.041	0	0	0	0
03/17/2002	1032	0.867	0.287	0.583	95.962	2.336	0.324	0.075	0.061	0.028	0.019	0.042	0	0	0	0
03/15/2002	1037	0.899	0.309	0.587	95.550	2.460	0.464	0.115	0.090	0.037	0.022	0.052	0	0	0	0
03/14/2002	1041	0.905	0.311	0.590	95.274	2.546	0.575	0.149	0.115	0.044	0.024	0.057	0	0	0	0
03/13/2002	1033	0.910	0.305	0.584	95.804	2.354	0.369	0.093	0.072	0.031	0.018	0.045	0	0	0	0
03/12/2002	1031	0.946	0.339	0.584	95.763	2.441	0.302	0.071	0.055	0.025	0.016	0.042	0	0	0	0
03/11/2002	1030	0.897	0.323	0.583	95.961	2.303	0.306	0.071	0.056	0.025	0.016	0.042	0	0	0	0
03/10/2002	1030	0.965	0.302	0.584	95.866	2.340	0.307	0.075	0.059	0.026	0.016	0.042	0	0	0	0
03/09/2002	1029	0.918	0.295	0.582	96.125	2.195	0.270	0.069	0.055	0.024	0.014	0.037	0	0	0	0
03/08/2002	1029	0.873	0.287	0.581	96.181	2.180	0.279	0.070	0.056	0.024	0.014	0.036	0	0	0	0
03/07/2002	1028	0.880	0.303	0.581	96.275	2.061	0.277	0.068	0.057	0.025	0.015	0.038	0	0	0	0
03/06/2002	1027	0.781	0.310	0.579	96.625	1.816	0.264	0.065	0.054	0.026	0.017	0.042	0	0	0	0
03/05/2002	1026	0.745	0.321	0.578	96.681	1.842	0.227	0.054	0.046	0.024	0.016	0.044	0	0	0	0
03/04/2002	1028	0.791	0.339	0.580	96.450	1.927	0.280	0.064	0.054	0.029	0.020	0.047	0	0	0	0

Deliverer

August 11, 2001

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 8-06-01
Specific Gravity, 60 °F	ASTM D 4052	Report	0.8525
API, 60 °F		Min 28.0, Max 40.0	34.5
Kinematic Viscosity, 100 °F	ASTM D 445		
cSt		Min 1.8, Max 5.8	2.83
SUS		Max 40	35.4
Flash Point, °F	ASTM D 93	Min 100	159
Pour Point, °C	ASTM D 97	Max 20	-21
Sulfur, mass %	ASTM D 2622	Max 0.050	0.0382
Nitrogen, mass %	ASTM D4629	Max 0.03	0.0137
Distillation, °F			
IBP	ASTM D 86		371.1
5%			398.2
10%			424.4
15%			437.2
20%			449.4
30%			473.0
40%			495.7
50%			515.8
60%			537.2
70%			559.4
80%			585.2
90%		Max 650	619.6
95%			647.1
FBP			665.8
Recovery			97.1
Loss, vol%			1.8
Residue, vol%			1.1
Sediment, mass %	ASTM D 473	Max 0.1	0.01
Water, %	ASTM D 95	Max 0.1	<0.05
Ash, %	ASTM D482	Max 0.0003	<0.0003
Net Heat of Combustion	ASTM D 240		18318.5.0 Btu/lb
MMBTU/Barrel		Min 5.9	5.5
Hydrogen Content, wt %	ASTM D 3701	Min 12.0	13.03
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.09
10% Bottoms		Max 0.25	0.09
Particulate Contamination			
Filterable Dirt (mg/100 mL)			0.04
Silica Content, wt %			<0.01
Algae Growth			Not detected

(OMTWAKJISWGO) page 2 of 2

Intertek Testing Services
Caleb Brett

REPORT OF ANALYSIS

Vessel : TTT 261
Port/Terminal : IMTT ST. ROSE, LA.
Client Ref :
Our Ref : GR/20-021413
Date Sample Taken : 05/30/2002
Date Submitted : 05/30/2002
Date Tested : 05/31/2002
Sample Designated As : NO.6 FUEL OIL
Drawn By : PERSONNEL OF ITS CALEB BRETT
Representing : HANDBLEND #1: SEE BELOW FOR DESCRIPTION

Lab Reference : 1413-3

TEST	METHOD	RESULT	UNITS
Gravity, API @ 60 F	D1298	10.0	Deg/API
Sulfur Content	D4294	0.986	Wt.%
Viscosity, Kin @ 122 F	D445	126.1	Cst
Viscosity, SFS @ 122 F	D2161	59.48	Secs
Flash Point (PMCC) Procedure B	D93	+230	Deg. F
Pour Point	D97	15.8	Deg. F
Water by Distillation	D95	0.25	Vol.%
Sediment by Extraction	D473	0.05	Wt.%
Ash Content	D482	0.062	Wt.%
Asphaltene Content	IP143	2.3	Wt.%
Heat of Combustion	D4868	6416017	BTU/BBL
Vanadium	D5863	19	ppm

HANDBLEND #1: S/T 254 (58.3%), S/T 1 (11.1%), S/T 101 (30.6%).

Specs OK
David Byrne
5/31/02

I T S - Caleb Brett

ATTACHMENT EU11-03

DESCRIPTION OF STACK SAMPLING FACILITIES

Sam O. Purdom Generating Station
July 1, 2002

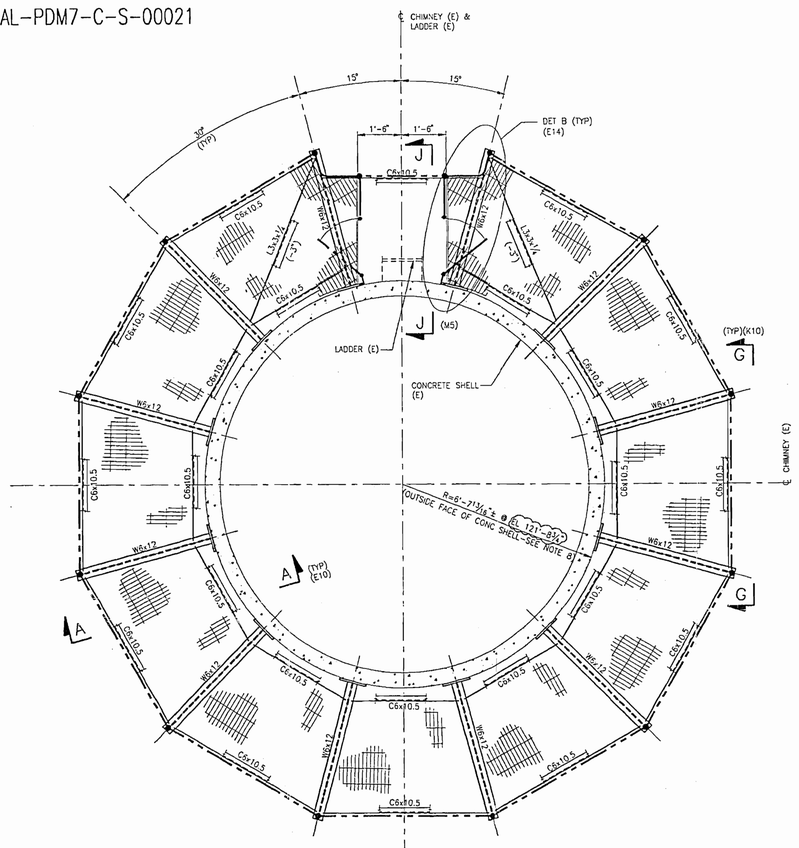
Description of Stack Sampling Facilities

Permanent stack testing facilities have been installed on the exhaust stack for Boiler No. 7 (EU-11). All test facilities are in accordance with Rule 62-297.310(6), Florida Administrative Code. These facilities also meet any Occupational Safety and Health Administration standards described in 29 CFR Part 1910, Subparts D and E. Testing equipment which is not permanently mounted, such as safety harnesses and electrical outlets will be made available to sampling personnel during each sampling event. Detailed drawings are attached.

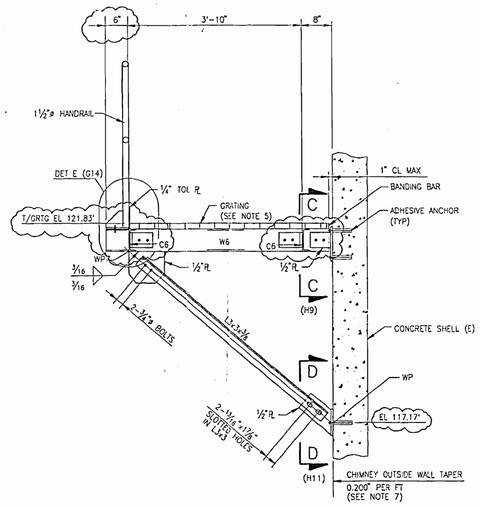
1290001-007 (1)

CTAL-PDM7-C-S-00021

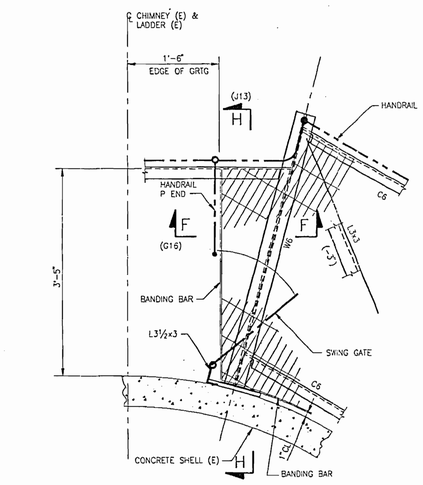
REV NO	DATE	REVISION	DR	CH	APPROVED
1	8-5-94	REVISED PER CONSTRUCTION DOCUMENTS REVISED:(A8,C9,C11,F9,G14)CONN. DET:(C9,D11,H4)ELEV.	DN		



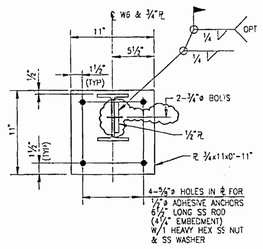
PLAN – PLATFORM AT EL 121.83'
DESIGN LIVE LOAD=150 PSF
(TOS -1¼" TYP UN)



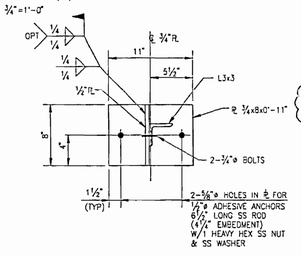
SECT A (E2)
¾"=1'-0"



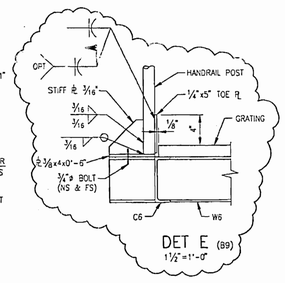
DET B (B5)
1"=1'-0"



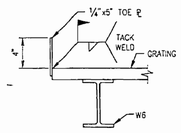
SECT C (C11)
1½"=1'-0"



SECT D (E11)
1½"=1'-0"



DET E (B9)
1½"=1'-0"



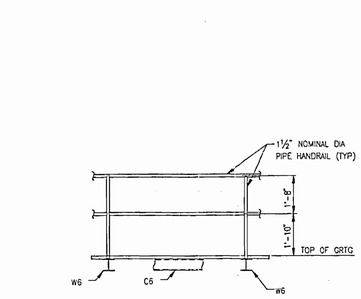
SECT F (C14)
NTS

NOTES:

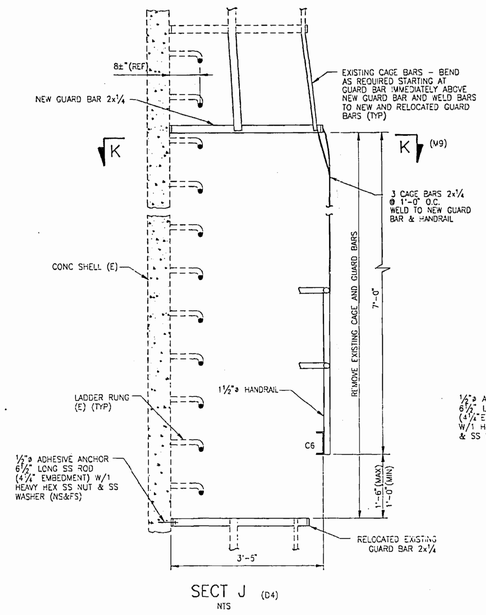
1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH EBASCO SPECIFICATION CTAL-4015-C-01.
2. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH ASTM A36, UNLESS NOTED OTHERWISE.
3. (E) DENOTES EXISTING.
   ———— DENOTES HANDRAIL.
4. ALL BOLTED CONNECTIONS SHALL BE ¾"ø A325 BOLTS UNLESS NOTED.
5. ALL GRATING SHALL BE GALVANIZED AND HAVE 1¼" DEEP BEARING BARS.
6. AFTER FABRICATION, ALL STEEL SURFACES (EXCEPT STAINLESS STEEL SURFACES) SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH SPECIFICATION CTAL-4015-C-01. AFTER ERECTION, ALL DAMAGED GALVANIZED SURFACES SHALL BE PREPARED AND TOUCHED-UP BY ERECTOR IN ACCORDANCE WITH SPECIFICATION CTAL-4015-C-01. ERECTOR SHALL FURNISH THE SHERWIN-WILLIAMS ZINC CLAD S, B69A45 PAINT REQUIRED FOR FIELD TOUCH-UP OF GALVANIZED SURFACES.
7. ADHESIVE ANCHORS SHALL BE HILTI HVA ADHESIVE ANCHORS WITH COMPONENTS AND DIMENSIONS AS SHOWN. ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
8. CONTRACTOR SHALL CONFIRM DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION AND INSTALLATION. IF DEVIATIONS ARE FOUND, NECESSARY ADJUSTMENT SHALL BE MADE, AFTER NOTIFYING OWNER.
9. CONTRACTOR SHALL REMOVE THE EXISTING SAF-T-CLIMB WIRE ROPE THAT IS ATTACHED TO THE LADDER RUNGS AND REPLACE IT WITH NEW 7/16 INCH DIAMETER STAINLESS STEEL WIRE ROPE FROM EL 92'-6" TO EL 184'-0".
10. ANY SURFACE AREA OF THE CHIMNEY DAMAGED PAINT FINISH DUE TO CONSTRUCTION SHALL BE REPAINTED BY THE CONTRACTOR. CONTRACTOR SHALL SUPPLY 5 GALLONS EACH OF THE FOLLOWING FOR TOUCH-UP PAINTING: TNEMEC CRYL SERIES 60 "CHILLIAN RED". CE-10 AND "CLOUD", BF-82.

REFERENCE DRAWINGS:

CONSOLIDATED CHIMNEY COMPANY:
180'x9' REINFORCED CONCRETE CHIMNEY-UNIT 7 2793

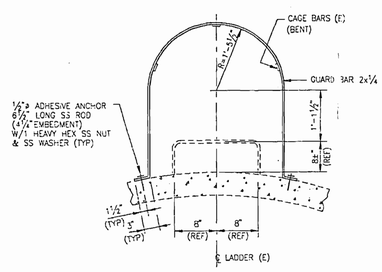


SECT H (B14)

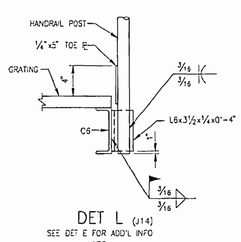


SECT J (D4)
NTS

SECT G (D6)
NTS



SECT K (J7)
¾"=1'-0"



DET L (J14)
SEE DET E FOR ADD'L INFO
NTS

GEORGIA REGISTERED NO. 19451 PROFESSIONAL ENGINEER MARK HOLLISTER SOUSA

MARK H. SOUSA CERTIFICATE No. PE 0044912 STATE OF FLORIDA REGISTERED ENGINEER

AUG 5, 1994

ATTENTION: ANY REVISION TO THIS DRAWING MUST BE MADE BY COMPUTER AIDED DESIGN

CITY OF TALLAHASSEE
SAM O. PURDOM GENERATING STATION
CONTINUOUS EMISSIONS MONITORING

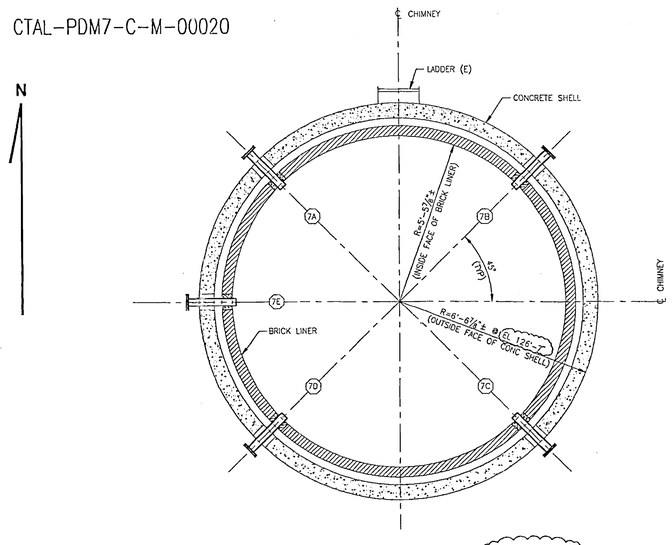
UNIT 7 CHIMNEY PLATFORM PLAN, SECTIONS AND DETAILS

EBASCO SERVICES INCORPORATED
145 TECHNOLOGY PARK, NORCROSS, GA. 30092-2979

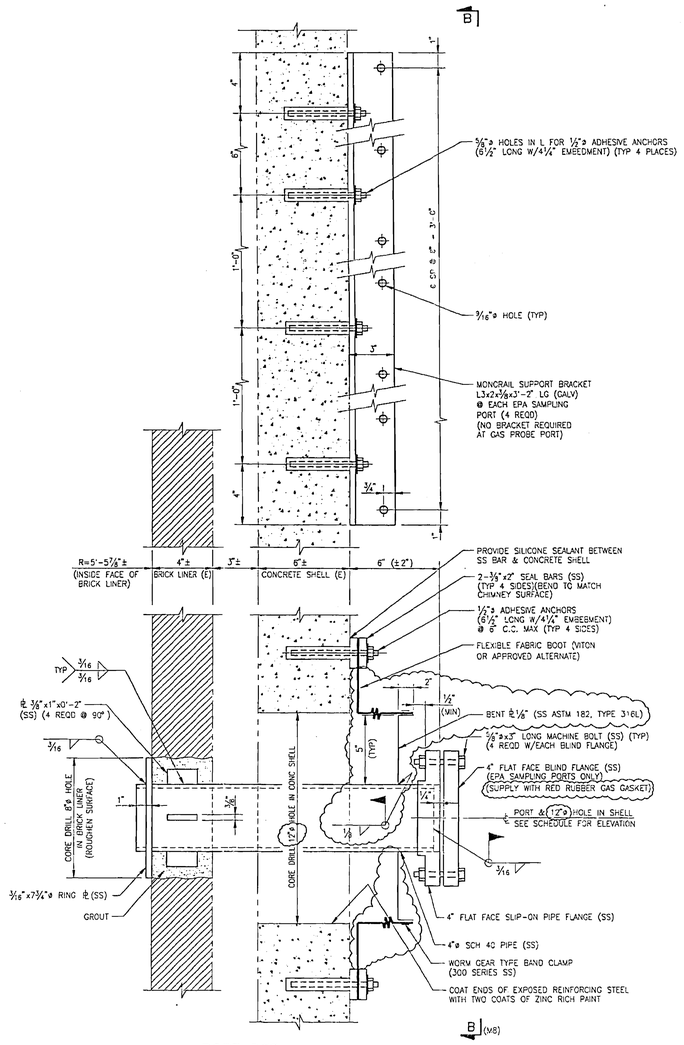
SCALE ½"=1'-0" UN	APPROVED	DATE 12-29-93
DEPT. CIVIL		CTAL-PDM7-C-S-00021 1
DR. G. FRANK	MARK H. SOUSA	
CH. J. SMITH	FK	

129001 (2)

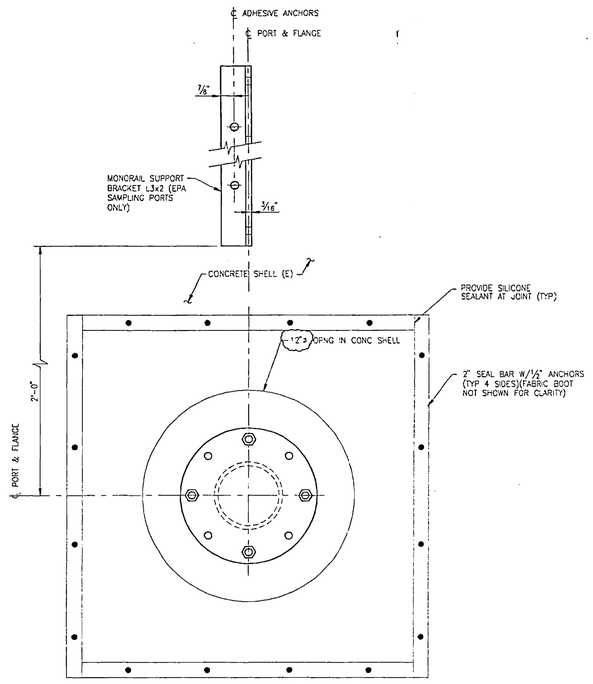
CTAL-PDM7-C-M-00020



PLAN – PORT ARRANGEMENT AT EL 126'-7"
TOP OF CHIMNEY FOUNDATION EL 9'-6"



PORT DET A
ELEVATION – EPA SAMPLING PORT (4 REQUIRED)
ELEVATION – GAS PROBE PORT (1 REQUIRED)
3"=1'-0"



SECT B (N5)
3"=1'-0"

CONTINUOUS EMISSIONS MONITORING (CEM) PORT SCHEDULE

PORT IDENTIFICATION	NOMINAL DIAMETER	ELEVATION (COLD POSITION)	CEM FUNCTION	PORT DETAIL	REMARKS
7A	4"	126'-7"	EPA SAMPLING	A	NEW PORT
7B	4"	126'-7"	EPA SAMPLING	A	NEW PORT
7C	4"	126'-7"	EPA SAMPLING	A	NEW PORT
7D	4"	126'-7"	EPA SAMPLING	A	NEW PORT
7E	4"	127'-4"	GAS PROBE	A	NEW PORT

REV NO	DATE	REVISION	DR	CH	APPROVED	
1	1-5-94	REVISED: U1 EPA SAMPLE PORT ELEVS.	LW	JJS	FK	M.SOUSA
2	8-5-94	REVISED PER CONSTRUCTION DOCUMENTS ADDED(L4)STN STL PORT COLLAR. REVISED:(B14,C5,F5) ELEV;(K9,M3,M5)CORE DRILL DIAMETER;(L4,M4,M5)BOOT DETAIL;(G18)NOTE 10.	TN	JJS	FK	M.SOUSA

NOTES:

1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH EBASCO SPECIFICATION CTAL-2416-C-01.
2. STEEL SHALL BE IN ACCORDANCE WITH ASTM A36, UNLESS NOTED OTHERWISE.
3. STAINLESS STEEL (SS) PIPE SHALL BE IN ACCORDANCE WITH ASTM A312, TYPE 316L. STAINLESS STEEL (SS) PLATES SHALL BE IN ACCORDANCE WITH ASTM A182, TYPE 316L.
4. STAINLESS STEEL (SS) PIPE FLANGES SHALL BE ANSI CLASS 150 LB AND SHALL BE IN ACCORDANCE WITH ASTM A182, TYPE 316L.
5. FOR WELDING OF STAINLESS STEEL TO STAINLESS STEEL, ELECTRODES SHALL BE ANSI/AWS A5.9, CLASS ER316L OR A5.4, CLASS E316L. FOR WELDING OF STAINLESS STEEL TO CARBON STEEL (CS), ELECTRODES SHALL BE ANSI/AWS A5.9, CLASS ER309 OR A5.4, CLASS E309.
6. STAINLESS STEEL (SS) MACHINE BOLTS SHALL BE IN ACCORDANCE WITH ASTM A320, GRADE B8. NUTS SHALL BE IN ACCORDANCE WITH ASTM A194, GRADE 8.
7. ALL ADHESIVE ANCHORS SHALL BE HILTI HIT C-100 WITH HAS SS RODS AS MANUFACTURED BY HILTI, INC., OR APPROVED ALTERNATE. ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ADHESIVE ANCHORS SHALL BE PROVIDED WITH 1 HEAVY HEX SS NUT AND 1 STANDARD SS WASHER.
8. ALL CARBON STEEL SURFACES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
9. ALL ELEVATIONS LOCATING PORTS ARE BASED ON THE BRICK LINER IN THE "COLD POSITION".
10. GROUT FOR PORT OPENINGS SHALL BE SECAR 41 AS MANUFACTURED BY LEFARGE CALCIUM ALUMINATES, OR APPROVED ALTERNATE, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
11. (E) DENOTES EXISTING.
12. UPON COMPLETION OF CONSTRUCTION, ANY TEMPORARY LUGS WELDED TO EXISTING STEEL SHALL BE REMOVED AND THE EXISTING STEEL SURFACE GROUND SMOOTH AND REPAINTED WITH ZINC-RICH ORGANIC PRIMER AND A FINAL COAT TO MATCH THE EXISTING PAINT.
13. ANY SURFACE AREA OF THE CHIMNEY WITH DAMAGED PAINT FINISH DUE TO CONSTRUCTION SHALL BE REPAINTED BY THE CONTRACTOR. CONTRACTOR SHALL SUPPLY 5 GALLONS EACH OF THE FOLLOWING FOR TOUCH-UP PAINTING: TNEMEC CRYL SERIES 60 "CHILLIAN RED", CE-10 AND "CLOUD", BF-82.

REFERENCE DRAWINGS:

CONSOLIDATED CHIMNEY COMPANY:
180'x9' REINFORCED CONCRETE CHIMNEY-UNIT 7 2793

GEORGIA REGISTERED NO. 18451 PROFESSIONAL ENGINEER MARK HOLLISTER SOUSA
MARK H SOUSA CERTIFICATE No. PE 0044912 STATE OF FLORIDA REGISTERED ENGINEER
AUG 5, 1994

ATTENTION: ANY REVISION TO THIS DRAWING MUST BE MADE BY COMPUTER AIDED DESIGN

CITY OF TALLAHASSEE
SAM O. PURDOM GENERATING STATION
CONTINUOUS EMISSIONS MONITORING

UNIT 7 CHIMNEY PORTS ARRANGEMENT AND DETAILS

EBASCO SERVICES INCORPORATED

SCALE ½"=1'-0" UN	APPROVED	DATE JULY 22, 1993
DEPT. CIVIL		CTAL-PDM7-C-M-00020 2
DR. T.NORRIS	MARK H SOUSA	
CH. J.SMITH	F KLEBAN	

ATTACHMENT EU11-04

PROCEDURES FOR STARTUP AND SHUTDOWN

Sam O. Purdom Generating Station
July 1, 2002

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the boilers at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the boilers. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU11-05

ALTERNATIVE METHODS OF OPERATION

Sam O. Purdom Generating Station
July 1, 2002

Alternative Methods of Operation

Boiler No. 7 (EU11) located at the Purdom Generating Station has a maximum heat input capacity of 621 mmBtu/hour and produces a nominal 44 MW of electricity. The alternative methods of operation (AMO) associated with the steam generator are related to the type of fuel being fired and rate of operation. The current AMOs include the following:

- ❖ Natural Gas Firing – Maximum Rate of 621 mmBtu/hr (LHV)

- ❖ Fuel Oil Firing – Maximum Rate of 621 mmBtu/hr (LHV)

    - Fuel Oil No. 6 (residual fuel oil)
    - Fuel Oil Nos. 2 through 6
    - On-Spec Used Oil
    - Co-firing any combination of Fuel Oil No. 6, Fuel Oil Nos. 2 through 6, On-Spec Used Oil, or Natural Gas

Note: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

ATTACHMENT EU11-06

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

Sam O. Purdom Generating Station
July 1, 2002

Additional Applicable Requirements

The additional applicable requirements are included within current Operating Permit No. 1290001-003-AV.

ATTACHMENT EU11-07

ACID RAIN APPLICATION

Sam O. Purdom Generating Station
July 1, 2002

Phase II Acid Rain Part Application

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

This submission is: ☐ New ☐ Revised **X** Renewal

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

Plant Name: **Sam O. Purdom Generating Station** State: **Florida** ORIS Code: **689**

STEP 2 Enter the unit ID# for each affected unit and indicate whether a unit is being repowered and the repowering plan being renewed by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e.

a	b	c	d	e
Unit ID#	Compliance Plan: Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	Compliance Plan: Repowering Plan	New Units: Commence Operation Date	New Units: Monitor Certification Deadline
Boiler No. 7	Yes	**No**		
Combined Cycle Combustion Turbine (No. 8)	Yes	**No**		
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit

☐ For each unit that is being repowered, the Repowering Extension Plan form is included.

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Plant Name: Sam O. Purdom Generating Station

Standard Requirements

Acid Rain Part Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Plant Name: Sam O. Purdom Generating Station

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

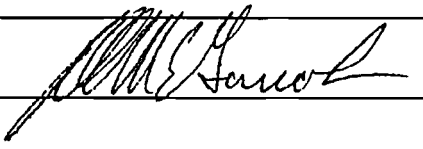
(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8 or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

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

Name: **Robert E. McGarrah, Manager of Power Production, City of Tallahassee**	
Signature: 	Date: **July 1, 2002**

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Auxiliary Boiler

4. Emissions Unit Identification Number:

[ ] No ID ID: **011** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

The City of Tallahassee applied to the Florida Department of Environmental Protection (FDEP) on November 14, 2001, for an Air Construction Permit Modification and Title V Air Operating Permit Revising for the Sam O. Purdom Generating Station (See Appendix A). The requested revisions will affect the operation of the Auxiliary Boiler at the Purdom Generating Station.

In response to the requested revisions, the FDEP provided the City of Tallahassee with an *Intent to Issue An Air Construction Permit and Title V Air Operating Permit Revision* (Notice of Intent) on June 3, 2002 (See Appendix A).

The deadline for submitting the Title V Renewal Application will expire prior to the conclusion of the required notice and comment period associated with the Notice of Intent.

Therefore, the information contained in this Title V Renewal Application is based on the data and allowable rates contained in current Operating Permit No. 1290001-003-AV, which expires on December 31, 2002.

The City of Tallahassee requests that the revisions requested by the City of Tallahassee and approved in the above referenced Notice of Intent be incorporated into this Title V Permit Renewal Application.

Emissions Unit Control Equipment

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

   N/A

2. Control Device or Method Code(s):

   N/A

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Kewanee**
   Model Number: **H3S-400-G**

2. Generator Nameplate Rating: **N/A** MW

3. Incinerator Information: **N/A**

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:	**16.74** mmBtu/hr
2. Maximum Incineration Rate: **N/A**	lb/hr tons/day
3. Maximum Process or Throughput Rate: **N/A**	
4. Maximum Production Rate: **N/A**	
5. Requested Maximum Operating Schedule:	
	hours/day days/week
	weeks/year **2,000*** hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	
***The Auxiliary Boiler is currently authorized under Permit No. 1290001-003-AV to operate 2,000 hours per year and only during times when Boiler Nos. 7 and 8 are not operating. The Applicant has requested authorization to operate 2,000 hours per year during times when either Boiler No. 7 or Boiler No. 8 is not operating. This request was approved in the FDEP Notice of Intent.**	

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Rule 62-204.800(7)(b)4 (as applicable) F.A.C.	
Rule 62-210.700(1),(4),(6) F.A.C.	
Rule 62-296.406 F.A.C.	
Rule 62-297.310(2)(b) F.A.C.	
Rule 62-297.310(4)(a)(2)(except a-c) F.A.C.	
Rule 62-297.310(7)(a)1,4a*9 F.A.C.	
Rule 62-297.310(8)(a),(b) F.A.C.	
40 CFR 60.7(b)	
40 CFR 60.8	
40 CFR 60.11	
40 CFR 60.12	
40 CFR 60.13	
40 CFR 60.19	
40 CFR 60.48c(a),(g),(i)	
*The City of Tallahassee is requesting that FDEP maintain the waiver from visible emissions compliance testing pursuant to Rule 62-297.310(7)(a)4a	

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? **EU12**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This emissions point represents the exhaust for the Auxiliary Boiler.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **W**	6. Stack Height: **30** feet	7. Exit Diameter: **2** feet
8. Exit Temperature: **420** °F	9. Actual Volumetric Flow Rate: **4,000** acfm	10. Water Vapor: **N/A**
11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**	
13. Emission Point UTM Coordinates: Zone: **16** East (km): **769.767** North (km): **3,339.784**		
14. Emission Point Comment (limit to 200 characters): **Value in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
Natural Gas		
2. Source Classification Code (SCC):	3. SCC Units:	
10200602	**mmSCF**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
0.0161	**32.19**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
*	**N/A**	**1040** **(assumed gross calorific value)**
10. Segment Comment (limit to 200 characters):		
***Clean pipeline quality natural gas with sulfur content limited to FERC tariff. The value in Field 9 is an estimate subject to fluctuation.** **Maximum Annual Rate is based on 2,000 hours per year operation.** **Value in Field 9 is an estimate subject to fluctuation.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
NOx			EL

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **0.46** lb/hour **CAP** tons/year	4. Synthetically Limited? **[X]**
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code:

8. Calculation of Emissions (limit to 600 characters):

lb/hr = (16.74 mmBtu/hr) x (MCF/1040 mmBtu) x (100gr-S/1000CF) x (1lb-S/7000 gr) x
(64lb-SO2 / 32 lb-S)

lb/hr = 0.46

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Emissions unit is subject to the facility-wide cap on SO_2.

Allowable Emissions

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **Facility-wide cap (80 TPY)**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year

5. Method of Compliance (limit to 60 characters):

Compliance will be based on unit fuel usage data and vendor fuel data

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

The Auxiliary Boiler is currently limited to firing natural gas not to exceed 2,000 hours per year. Its emissions are subject to the facility-wide cap on SO_2.

Annual emissions will be based on actual sulfur content of the natural gas.

Potential/Fugitive Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **2.44** lb/hour **Cap** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code:

8. Calculation of Emissions (limit to 600 characters):

lb/hr = (16.74 mmBtu/hr) x (MCF/1040 mmBtu) x (mmCF/100 MCF) x (140 lb/mmCF)

lb/hr = 2.44

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Emissions unit is subject to the facility-wide cap on NOx.

Allowable Emissions

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **Facility-wide cap (467 TPY)**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year

5. Method of Compliance (limit to 60 characters):

Compliance will be based on unit fuel usage logs, AP-42 emission factors, and vendor fuel data

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

The Auxiliary Boiler is currently limited to firing natural gas not to exceed 2,000 hours per year. Its emissions are subject to the facility-wide cap on NOx.

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:	2. Basis for Allowable Opacity:
VE20	[X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE99	[X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **2** hour/ 24 hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **In accordance with 62-210.700(1), F.A.C., excess emissions resulting from startup, shutdown or malfunction are permitted providing that the duration of excess emissions be minimized but in no case to exceed two hours in any 24 hour period, unless authorized by the Department for longer duration.**	

KB

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

Continuous Monitoring System:

1. Parameter Code: **N/A**	2. Pollutant(s): **N/A**
3. CMS Requirement: **N/A** [ ] Rule [ ] Other	
4. Monitor Information: **N/A** Manufacturer: Model Number: Serial Number:	
5. Installation Date: **N/A**	6. Performance Specification Test Date: **N/A**
7. Continuous Monitor Comment (limit to 200 characters): **N/A**	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: _____ [ ] Not Applicable [**X**] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU12-01** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [**X**] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU12-02** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: _____ [**X**] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU12-03** [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT EU12-01

FUEL ANALYSIS

Sam O. Purdom Generating Station
July 1, 2002

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU-12, Auxiliary Boiler. Maximum values may be higher. The fuels represented in the analyses include natural gas only.

FGT
Last Updated 5/28/02 7:56

Station Name	Total Sulfur Previous Day Avg ppm 05/26/02	Total Sulfur Previous Day Avg Grains/hcf 05/26/02
Perry 36" Stream #1	2.1	0.132
Perry 30" Stream #2	2.9	0.184
Perry 24" Stream #3	3.3	0.206
Brooker 24" Stream	3.0	0.187

Florida Gas makes no warranty or representation whatsoever as to the accuracy of th
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30 Stream #: Avg Grains/
05/25/02	33	2.128	0.133	3.668	0.229
05/24/02	32	2.366	0.148	4.319	0.270
05/23/02	31	3.001	0.188	4.979	0.311
05/22/02	30	3.906	0.244	4.767	0.298
05/21/02	29	4.803	0.300	4.542	0.284
05/20/02	28	3.510	0.219	4.099	0.256
05/19/02	27	3.311	0.207	3.865	0.242
05/18/02	26	3.893	0.243	5.044	0.315
05/17/02	25	2.135	0.133	2.128	0.133
05/16/02	24	1.986	0.124	1.757	0.110
05/15/02	23	2.757	0.172	2.019	0.126
05/14/02	22	2.210	0.138	1.694	0.106
05/13/02	21	1.901	0.119	1.844	0.115
05/12/02	20	1.827	0.114	1.536	0.096
05/11/02	19	1.820	0.114	1.292	0.081
05/10/02	18	1.848	0.115	1.409	0.088
05/09/02	17	1.656	0.104	1.365	0.085
05/08/02	16	1.871	0.117	1.570	0.098
05/07/02	15	2.676	0.167	2.158	0.135
05/06/02	14	2.819	0.176	2.233	0.140
05/05/02	13	2.428	0.152	1.901	0.119
05/04/02	12	3.045	0.190	2.126	0.133
05/03/02	11	2.941	0.184	2.316	0.145
05/02/02	10	2.381	0.149	2.045	0.128
05/01/02	9	1.863	0.116	1.625	0.102
04/30/02	8	1.648	0.103	1.374	0.086
04/29/02	7	1.746	0.109	1.343	0.084
04/28/02	6	1.709	0.107	1.387	0.087
04/27/02	5	1.640	0.103	1.389	0.087
04/26/02	4	1.957	0.122	2.094	0.131
04/25/02	3	2.698	0.169	3.010	0.188
04/24/02	2	2.592	0.162	2.300	0.144
04/23/02	1	2.344	0.146	2.306	0.144

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daily chromatograph

date requested: Jun 4 2002 1:07PM

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

Chromatograph Report For: 8030 - PERRY STREAM #1

download

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
06/04/2002	1037	0.884	0.301	0.587	95.498	2.578	0.444	0.104	0.093	0.031	0.018	0.049	0	0	0	0
06/03/2002	1036	0.922	0.311	0.587	95.513	2.523	0.434	0.104	0.090	0.032	0.019	0.052	0	0	0	0
06/02/2002	1032	0.851	0.326	0.583	96.138	1.994	0.403	0.101	0.086	0.031	0.018	0.052	0	0	0	0
06/01/2002	1033	0.868	0.365	0.584	95.974	2.044	0.436	0.111	0.094	0.034	0.020	0.054	0	0	0	0
05/31/2002	1033	0.886	0.365	0.585	95.942	2.052	0.438	0.114	0.095	0.035	0.020	0.053	0	0	0	0
05/30/2002	1031	0.851	0.332	0.583	96.229	1.897	0.394	0.103	0.089	0.033	0.019	0.053	0	0	0	0
05/29/2002	1031	0.816	0.327	0.582	96.254	1.922	0.391	0.100	0.082	0.034	0.020	0.055	0	0	0	0
05/28/2002	1032	0.827	0.322	0.583	96.210	1.954	0.408	0.101	0.081	0.030	0.018	0.050	0	0	0	0
05/27/2002	1031	0.844	0.332	0.583	96.175	1.984	0.401	0.095	0.077	0.028	0.017	0.047	0	0	0	0
05/26/2002	1033	0.829	0.315	0.584	96.067	2.059	0.438	0.106	0.086	0.031	0.018	0.051	0	0	0	0
05/25/2002	1034	0.863	0.304	0.584	95.968	2.114	0.443	0.110	0.093	0.033	0.019	0.053	0	0	0	0
05/24/2002	1034	0.856	0.291	0.584	96.013	2.075	0.450	0.112	0.095	0.034	0.020	0.055	0	0	0	0
05/23/2002	1038	0.980	0.277	0.589	95.554	2.244	0.551	0.149	0.116	0.044	0.024	0.062	0	0	0	0
05/22/2002	1041	0.960	0.279	0.590	95.302	2.428	0.612	0.164	0.128	0.046	0.024	0.058	0	0	0	0
05/21/2002	1042	0.891	0.281	0.590	95.359	2.436	0.617	0.161	0.131	0.044	0.023	0.057	0	0	0	0
05/20/2002	1045	0.927	0.301	0.593	94.953	2.674	0.682	0.179	0.146	0.049	0.026	0.063	0	0	0	0
05/19/2002	1043	0.953	0.289	0.592	95.082	2.558	0.665	0.174	0.143	0.048	0.025	0.062	0	0	0	0
05/18/2002	1043	0.929	0.287	0.591	95.131	2.574	0.641	0.166	0.136	0.047	0.025	0.063	0	0	0	0
05/17/2002	1052	0.978	0.294	0.598	94.364	2.955	0.847	0.224	0.179	0.060	0.031	0.070	0	0	0	0
05/16/2002	1048	0.942	0.295	0.594	94.712	2.800	0.758	0.197	0.157	0.052	0.026	0.061	0	0	0	0
05/15/2002	1041	0.864	0.297	0.589	95.287	2.586	0.587	0.143	0.119	0.039	0.022	0.054	0	0	0	0
05/14/2002	1045	0.902	0.298	0.592	94.942	2.718	0.687	0.178	0.144	0.048	0.025	0.058	0	0	0	0
05/13/2002	1044	0.900	0.280	0.591	95.095	2.631	0.657	0.171	0.136	0.047	0.025	0.057	0	0	0	0
05/12/2002	1044	0.905	0.270	0.591	95.121	2.620	0.647	0.169	0.134	0.048	0.026	0.062	0	0	0	0
05/11/2002	1044	0.867	0.280	0.591	95.082	2.736	0.625	0.156	0.127	0.044	0.024	0.058	0	0	0	0
05/10/2002	1047	0.887	0.283	0.593	94.822	2.883	0.679	0.171	0.140	0.048	0.026	0.061	0	0	0	0
05/09/2002	1046	0.889	0.276	0.592	94.963	2.764	0.665	0.170	0.138	0.048	0.026	0.062	0	0	0	0
05/08/2002	1044	0.873	0.281	0.591	95.133	2.659	0.629	0.163	0.130	0.046	0.025	0.061	0	0	0	0
05/07/2002	1042	0.851	0.286	0.589	95.361	2.522	0.578	0.150	0.121	0.044	0.025	0.062	0	0	0	0
05/06/2002	1043	0.877	0.288	0.591	95.168	2.632	0.612	0.160	0.127	0.047	0.026	0.063	0	0	0	0
05/05/2002	1044	0.891	0.298	0.591	95.041	2.764	0.602	0.154	0.121	0.045	0.025	0.059	0	0	0	0
05/04/2002	1039	0.901	0.303	0.588	95.326	2.682	0.473	0.109	0.088	0.037	0.023	0.058	0	0	0	0
05/03/2002	1033	0.958	0.313	0.586	95.605	2.478	0.394	0.088	0.071	0.030	0.018	0.044	0	0	0	0
05/02/2002	1030	0.877	0.294	0.582	96.274	1.957	0.352	0.088	0.071	0.029	0.017	0.041	0	0	0	0
05/01/2002	1029	0.902	0.287	0.582	96.304	1.926	0.345	0.089	0.070	0.027	0.016	0.035	0	0	0	0
04/30/2002	1028	0.895	0.284	0.581	96.362	1.880	0.344	0.087	0.070	0.027	0.015	0.035	0	0	0	0
04/29/2002	1029	0.887	0.291	0.581	96.335	1.900	0.346	0.088	0.074	0.027	0.016	0.037	0	0	0	0
04/28/2002	1029	0.903	0.291	0.582	96.319	1.873	0.362	0.094	0.077	0.028	0.016	0.036	0	0	0	0
04/27/2002	1030	0.917	0.290	0.583	96.176	1.982	0.373	0.097	0.079	0.029	0.017	0.039	0	0	0	0
04/26/2002	1031	0.930	0.282	0.583	96.082	2.068	0.374	0.097	0.078	0.030	0.018	0.041	0	0	0	0
04/25/2002	1030	0.913	0.282	0.583	96.129	2.074	0.357	0.092	0.075	0.027	0.016	0.035	0	0	0	0
04/24/2002	1028	0.872	0.288	0.581	96.387	1.900	0.329	0.085	0.066	0.025	0.014	0.034	0	0	0	0
04/23/2002	1030	0.901	0.278	0.582	96.183	2.045	0.353	0.090	0.074	0.026	0.015	0.035	0	0	0	0
04/22/2002	1030	0.903	0.279	0.582	96.158	2.053	0.359	0.093	0.076	0.028	0.016	0.035	0	0	0	0
04/21/2002	1029	0.921	0.280	0.582	96.221	1.993	0.348	0.091	0.070	0.026	0.015	0.035	0	0	0	0
04/20/2002	1029	0.927	0.274	0.582	96.236	1.976	0.352	0.091	0.071	0.026	0.015	0.033	0	0	0	0

04/19/2002	1029	0.923	0.281	0.582	96.218	1.994	0.344	0.088	0.070	0.027	0.017	0.038	0	0	0	0
04/18/2002	1029	0.930	0.280	0.582	96.260	1.956	0.339	0.087	0.068	0.027	0.016	0.036	0	0	0	0
04/17/2002	1029	0.869	0.295	0.582	96.293	1.957	0.342	0.088	0.070	0.028	0.017	0.042	0	0	0	0
04/16/2002	1034	0.922	0.290	0.586	95.788	2.236	0.455	0.119	0.093	0.034	0.019	0.044	0	0	0	0
04/15/2002	1029	0.923	0.291	0.582	96.206	1.976	0.357	0.092	0.073	0.028	0.016	0.037	0	0	0	0
04/14/2002	1028	0.911	0.291	0.581	96.318	1.921	0.329	0.085	0.067	0.026	0.016	0.036	0	0	0	0
04/13/2002	1027	0.916	0.287	0.581	96.366	1.926	0.299	0.076	0.060	0.023	0.014	0.032	0	0	0	0
04/12/2002	1027	0.929	0.296	0.581	96.310	1.948	0.304	0.077	0.061	0.025	0.015	0.036	0	0	0	0
04/11/2002	1028	0.933	0.302	0.582	96.216	1.980	0.337	0.084	0.066	0.027	0.016	0.039	0	0	0	0
04/10/2002	1031	0.908	0.307	0.583	96.054	2.116	0.359	0.091	0.071	0.030	0.019	0.045	0	0	0	0
04/09/2002	1029	0.860	0.304	0.581	96.273	1.997	0.331	0.083	0.064	0.028	0.017	0.042	0	0	0	0
04/08/2002	1028	0.858	0.306	0.580	96.425	1.874	0.317	0.082	0.063	0.025	0.015	0.036	0	0	0	0
04/07/2002	1033	0.894	0.311	0.584	95.964	2.132	0.413	0.104	0.084	0.033	0.019	0.045	0	0	0	0
04/06/2002	1031	0.912	0.327	0.584	95.902	2.260	0.358	0.084	0.066	0.029	0.018	0.043	0	0	0	0
04/05/2002	1038	1.007	0.298	0.590	95.207	2.616	0.531	0.133	0.102	0.039	0.022	0.046	0	0	0	0
04/04/2002	1038	1.000	0.285	0.589	95.298	2.560	0.515	0.134	0.102	0.039	0.022	0.046	0	0	0	0
04/03/2002	1043	1.002	0.279	0.592	95.012	2.651	0.625	0.166	0.129	0.049	0.027	0.061	0	0	0	0
04/02/2002	1047	0.949	0.286	0.594	94.907	2.649	0.693	0.181	0.156	0.060	0.037	0.082	0	0	0	0
04/01/2002	1045	0.904	0.284	0.592	95.097	2.570	0.652	0.168	0.146	0.058	0.037	0.083	0	0	0	0
03/31/2002	1046	0.921	0.278	0.593	95.063	2.584	0.659	0.171	0.150	0.058	0.036	0.081	0	0	0	0
03/30/2002	1045	0.925	0.289	0.592	95.092	2.552	0.655	0.167	0.147	0.057	0.036	0.081	0	0	0	0
03/29/2002	1047	0.969	0.285	0.594	94.870	2.655	0.698	0.181	0.159	0.060	0.037	0.085	0	0	0	0
03/28/2002	1048	0.929	0.280	0.594	94.910	2.641	0.704	0.182	0.163	0.062	0.039	0.088	0	0	0	0
03/27/2002	1048	0.949	0.281	0.595	94.789	2.713	0.730	0.191	0.164	0.061	0.037	0.085	0	0	0	0
03/26/2002	1044	0.933	0.295	0.592	95.075	2.583	0.643	0.166	0.142	0.054	0.032	0.076	0	0	0	0
03/25/2002	1044	0.922	0.295	0.592	95.131	2.539	0.642	0.167	0.142	0.054	0.032	0.077	0	0	0	0
03/24/2002	1042	0.909	0.288	0.590	95.324	2.463	0.590	0.155	0.128	0.048	0.028	0.068	0	0	0	0
03/23/2002	1038	0.889	0.285	0.588	95.555	2.388	0.523	0.135	0.105	0.041	0.023	0.055	0	0	0	0
03/22/2002	1040	0.839	0.285	0.588	95.574	2.380	0.543	0.142	0.111	0.043	0.025	0.058	0	0	0	0
03/21/2002	1042	0.864	0.281	0.590	95.309	2.524	0.606	0.159	0.124	0.048	0.027	0.060	0	0	0	0
03/20/2002	1040	0.869	0.285	0.588	95.462	2.487	0.530	0.135	0.105	0.043	0.026	0.057	0	0	0	0
03/19/2002	1033	0.919	0.287	0.584	95.757	2.448	0.353	0.083	0.064	0.029	0.019	0.040	0	0	0	0
03/18/2002	1032	0.910	0.282	0.584	95.835	2.400	0.337	0.082	0.065	0.030	0.019	0.041	0	0	0	0
03/17/2002	1032	0.867	0.287	0.583	95.962	2.336	0.324	0.075	0.061	0.028	0.019	0.042	0	0	0	0
03/15/2002	1037	0.899	0.309	0.587	95.550	2.460	0.464	0.115	0.090	0.037	0.022	0.052	0	0	0	0
03/14/2002	1041	0.905	0.311	0.590	95.274	2.546	0.575	0.149	0.115	0.044	0.024	0.057	0	0	0	0
03/13/2002	1033	0.910	0.305	0.584	95.804	2.354	0.369	0.093	0.072	0.031	0.018	0.045	0	0	0	0
03/12/2002	1031	0.946	0.339	0.584	95.763	2.441	0.302	0.071	0.055	0.025	0.016	0.042	0	0	0	0
03/11/2002	1030	0.897	0.323	0.583	95.961	2.303	0.306	0.071	0.056	0.025	0.016	0.042	0	0	0	0
03/10/2002	1030	0.965	0.302	0.584	95.866	2.340	0.307	0.075	0.059	0.026	0.016	0.042	0	0	0	0
03/09/2002	1029	0.918	0.295	0.582	96.125	2.195	0.270	0.069	0.055	0.024	0.014	0.037	0	0	0	0
03/08/2002	1029	0.873	0.287	0.581	96.181	2.180	0.279	0.070	0.056	0.024	0.014	0.036	0	0	0	0
03/07/2002	1028	0.880	0.303	0.581	96.275	2.061	0.277	0.068	0.057	0.025	0.015	0.038	0	0	0	0
03/06/2002	1027	0.781	0.310	0.579	96.625	1.816	0.264	0.065	0.054	0.026	0.017	0.042	0	0	0	0
03/05/2002	1026	0.745	0.321	0.578	96.681	1.842	0.227	0.054	0.046	0.024	0.016	0.044	0	0	0	0
03/04/2002	1028	0.791	0.339	0.580	96.450	1.927	0.280	0.064	0.054	0.029	0.020	0.047	0	0	0	0

ATTACHMENT EU12-02

PROCEDURES FOR STARTUP AND SHUTDOWN

Sam O. Purdom Generating Station
July 1, 2002

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the boilers at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the boilers. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU12-03

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

Sam O. Purdom Generating Station
July 1, 2002

Identification of Additional Applicable Requirements

The additional applicable requirements are included within current Operating Permit No. 1290001-003-AV.

The City of Tallahassee applied to the Florida Department of Environmental Protection (FDEP) on November 14, 2001, for an Air Construction Permit Modification and Title V Air Operating Permit Revising for the Sam O. Purdom Generating Station (See Appendix A). The requested revisions will affect the operation of the Auxiliary Boiler at the Purdom Generating Station.

In response to the requested revisions, the FDEP provided the City of Tallahassee with an *Intent to Issue An Air Construction Permit and Title V Air Operating Permit Revision* (Notice of Intent) on June 3, 2002 (See Appendix A).

The deadline for submitting the Title V Renewal Application will expire prior to the conclusion of the required notice and comment period associated with the Notice of Intent.

Therefore, the information contained in this Title V Renewal Application is based on the data and allowable rates contained in current Operating Permit No. 1290001-003-AV, which expires on December 31, 2002.

The City of Tallahassee requests that the revisions requested by the City of Tallahassee and approved in the above referenced Notice of Intent be incorporated into this Title V Permit Renewal Application.

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

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

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Combined Cycle Combustion Turbine – Unit Number 8

4. Emissions Unit Identification Number:
[ ] No ID ID: **012** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**May 19, 2000**	**49**	[**X**]

9. Emissions Unit Comment:

The City of Tallahassee applied to the Florida Department of Environmental Protection (FDEP) on November 14, 2001, for an Air Construction Permit Modification and Title V Air Operating Permit Revising for the Sam O. Purdom Generating Station (See Appendix A). The requested revisions will affect the operation of the Combined Cycle Combustion Turbine (currently EU-012) at the Purdom Generating Station.

In response to the requested revisions, the FDEP provided the City of Tallahassee with an *Intent to Issue An Air Construction Permit and Title V Air Operating Permit Revision* (Notice of Intent) on June 3, 2002 (See Appendix A).

The deadline for submitting the Title V Renewal Application will expire prior to the conclusion of the required notice and comment period associated with the Notice of Intent.

Therefore, the information contained in this Title V Renewal Application is based on the data and allowable rates contained in current Operating Permit No. 1290001-003-AV, which expires on December 31, 2002.

The City of Tallahassee requests that the revisions requested by the City of Tallahassee and approved in the above referenced Notice of Intent be incorporated into this Title V Permit Renewal Application.

Emissions Unit Control Equipment

A.

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

   Oxides of Nitrogen
   Dry Low NOx Combustors – Natural Gas Firing

2. Control Device or Method Code(s): **025**

B.

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

   Oxides of Nitrogen
   Water Injection – Fuel Oil Firing

2. Control Device or Method Code(s): **028**

Emissions Unit Details

1. Package Unit:
   Manufacturer: **General Electric**
   Model Number: **MS7001FA**

2. Generator Nameplate Rating: **160** MW (nominal)

3. Incinerator Information: **N/A**

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: **1914.1** mmBtu/hr	
2. Maximum Incineration Rate: **N/A** lb/hr	tons/day
3. Maximum Process or Throughput Rate: **N/A**	
4. Maximum Production Rate: **N/A**	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8760** hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

The total generating capacity of the unit has been set at a nominal 250 MW (GT-160 MW and ST – 90 MW). The maximum heat input occurs while firing distillate fuel oil at 100 percent load. At 20° Fahrenheit this corresponds to 1914.1 mmBtu/hr for Number 2 (0.05% Sulfur) diesel fuel oil and 1682.2 mmBtu/hr for natural gas.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Rule 62-204.800(7)(b)39,(d) F.A.C.	40 CFR 60.13(a),(b),(d)(1),(e),(f),(h)
Rule 62-204.800(14);(15);(16) F.A.C.	40 CFR 60.332(a)(1),(3);(b);(f);(i)
Rule 62-210.550 F.A.C.	40 CFR 60.333
Rule 62-210.650 F.A.C.	40 CFR 60.334
Rule 62-210.700(1),(4),(6) F.A.C.	40 CFR 60.335
Rule 62-214.300 F.A.C.	40 CFR 72.9
Rule 62-214.330(1) F.A.C.	40 CFR 72.20(a)-(c)
Rule 62-214.350(2),(3),(5),(6) F.A.C.	40 CFR 72.21
Rule 62-296.320(4)(b) F.A.C.	40 CFR 72.22
Rule 62-297.310(1),(2),(3),(4),(5) F.A.C.	40 CFR 72.23
Rule 62-297.310(6)(a),(c)-(g) F.A.C.	40 CFR 72.24
Rule 62-297.310(7)(a)1,3,4,5,8,9,(c) F.A.C.	40 CFR 72.30(a),(b)(2)(ii),(c),(d)
Rule 62-297.310(8) F.A.C.	40 CFR 72.31
40 CFR 60.7(a)(1),(3),(4),(5)	40 CFR 72.32
40 CFR 60.7(b),(c),(d),(f)	40 CFR 72.40(a)(1)
40 CFR 60.8	40 CFR 72.51
40 CFR 60.11(a),(b),(c),(d);(e)(1),(2)	

40 CFR 60.12	40 CFR 72.82
40 CFR 72.90	40 CFR 75.33(a),(c)
40 CFR Part 72, Appendix A and B	40 CFR 75.35
40 CFR 75.4(b)(2)	40 CFR 75.36
40 CFR 75.5	40 CFR 75.53
40 CFR 75.10(a)(1),(2),(3)	40 CFR 75.54 [except (c) & (f)]
40 CFR 75.10(b),(c),(d),(f),(g)	40 CFR 75.58(c)
40 CFR 75.11(d)(2)	40 CFR 75.59
40 CFR 75.12(a),(b)	40 CFR 75.60
40 CFR 75.13	40 CFR 75.61
40 CFR 75.14(c)	40 CFR 75.62
40 CFR 75.20(except (e),(f),(h))	40 CFR 75.63
40 CFR 75.22	40 CFR 75.64
40 CFR 75.24	40 CFR 75, Appendix A
40 CFR 75.30	40 CFR 75, Appendix B
40 CFR 75.31	40 CFR 75, Appendix C
40 CFR 75.32	40 CFR 75, Appendix D
40 CFR 77.3	40 CFR 75, Appendix G,2,4
40 CFR 77.5(b)	40 CFR 75, Appendix H (reserved)
40 CFR 77.6	
40 CFR 73.33(c),(d),(e)	

40 CFR 73.35	
40 CFR 75.52	
40 CFR 72.21(a),(c)	

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? **EU13**	2. Emission Point Type Code: **1**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):

This emissions point represents the exhaust for the Unit 8 combined cycle combustion turbine.

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**

5. Discharge Type Code:	6. Stack Height:	7. Exit Diameter:
V	**200 feet (above ground level)**	**16.5** feet
8. Exit Temperature:	9. Actual Volumetric Flow Rate:	10. Water Vapor:
171-203 °F	**622,306 – 1,119,935** acfm*	**N/A**

11. Maximum Dry Standard Flow Rate: **N/A**	12. Nonstack Emission Point Height: **N/A**

13. Emission Point UTM Coordinates:

Zone: **16** East (km): **769.611** North (km): **3339.767**

14. Emission Point Comment (limit to 200 characters):

***Depending upon fuel, ambient temperature, and load.**

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):		
Natural Gas		
2. Source Classification Code (SCC):	3. SCC Units:	
20100201	**mmSCF**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
1.9*	**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
***	**N/A**	**932 (LHV)**

10. Segment Comment (limit to 200 characters):

***Maximum hourly rate is based on full load operation at an ambient temperature of 20° Fahrenheit. Actual hourly rate will vary depending on ambient conditions.**

****Maximum Annual Rates will vary based on facility-wide SO_2 and NOx caps.**

*****Clean pipeline quality natural gas with sulfur content limited to FERC tariff.**

The value in Field 9 is an estimate and subject to fluctuation

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
No. 2 (0.05% Sulfur) Diesel Fuel Oil		
2. Source Classification Code (SCC):	3. SCC Units:	
20100101	**Kgals**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
12.7*	**	**N/A**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
0.05	**N/A**	**131 (LHV)**

10. Segment Comment (limit to 200 characters):

***Maximum hourly rate is based on full load operation at an ambient temperature of 20° Fahrenheit. Actual hourly rate will vary depending on ambient conditions.**

****Maximum Annual Rates will vary based on facility-wide SO_2 and NOx caps.**

The value in Field 9 is an estimate subject to fluctuation.

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
PM			NS
PM_{10}			NS
NOx			EL
SO_2			EL
VOC			NS
H106			NS
H107			NS
H113			NS
H133			NS
HAPS			NS

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

Potential/Fugitive Emissions: Pollutant 1 of 5

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **192** lb/hour (**See Field 9**) tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **lb/hr – See Appendix A of the PSD Application** **See also Field 9 below**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Actual hourly emissions will vary based on load and ambient temperature. Actual annual emissions will be limited indirectly by the facility-wide emissions cap on SO_2 and NOx.**	

Allowable Emissions

1. Basis for Allowable Emissions Code: **Rule – BACT (62-212.400(5)(c) F.A.C.)**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **Natural Gas – 25 ppmvd** **Fuel Oil – 90 ppmvd**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year

5. Method of Compliance (limit to 60 characters): **Testing concurrent to 40 CFR Part 75 RATA testing, or by 3 one-hour runs by Method 10 (may be performed at less than capacity)**
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

Potential/Fugitive Emissions: Pollutant 2 of 5

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **17** lb/hour tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **lb/hr – See Appendix A of the PSD Application**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Actual annual emissions will be limited indirectly by the facility-wide emissions caps on SO_2 and NOx**	

Emissions Unit Information Section 7 of 7

Allowable Emissions

1. Basis for Allowable Emissions Code: **Rule – BACT (62-212.400(5)(c) F.A.C)**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **N/A**
5. Method of Compliance (limit to 60 characters): **N/A**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **BACT for this unit is combustion turbine inlet air filtration, good combustion practices, and fuel quality. No emission limits are proposed.**	

Potential/Fugitive Emissions: Pollutant 3 of 5

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control: **N/A**	
3. Potential Emissions: **17** lb/hour (**See Field 9**) tons/year		4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: **N/A** Reference:		7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **lb/hr – See Appendix A of the PSD Application**		

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):
Actual annual emissions will be limited indirectly by facility-wide emission caps on SO_2 and NOx.

Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
Rule – BACT (62-212.400(5)(c) F.A.C.)	**N/A**
3. Requested Allowable Emissions and Units: **N/A**	4. Equivalent Allowable Emissions: **N/A**
5. Method of Compliance (limit to 60 characters): **N/A**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **BACT for this unit is combustion turbine inlet air filtration, good combustion practices, and fuel quality. No emissions limits are proposed.**	

Potential/Fugitive Emissions: Pollutant 4 of 5

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **N/A**	
3. Potential Emissions: **347** lb/hour	**Cap** tons/year	4. Synthetically Limited? [**X**]

5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **lb/hr – See Appendix A of the PSD Application** **Facility-Wide Cap = 467 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential hourly emissions based on 100 percent load at an ambient temperature of 20° Fahrenheit when firing fuel oil. These short-term potentials do not include start-up, shutdown or malfunctions which are included within the requested annual cap.** **Information contained in Appendix A of the PSD application regarding short-term NOx emission rates reflects operations at steady-state and does not include allowances for fuels containing fuel bound nitrogen levels above 0.015 percent. Predicted short-term steady-state emission levels follow 2-4 hour start-up periods.**	

Allowable Emissions: 1 of 2

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **NSPS Emission Limits**	4. Equivalent Allowable Emissions: **N/A**
5. Method of Compliance (limit to 60 characters): **EPA Reference Method 20**	

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):
This unit is subject to 40 CFR Part 60, Subpart GG. Maximum short-term rates, excluding start-up, shutdown and malfunction must meet the limits of 40 CFR 60.332(a)(1), and (3). Actual annual emissions are limited by the facility-wide caps on NOx and SO_2.

Allowable Emissions: 2 of 2

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
ESCPSD	**N/A**
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
467 TPY	**N/A**
5. Method of Compliance (limit to 60 characters): **CEMS Data**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

Potential/Fugitive Emissions: Pollutant 5 of 5

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:	
SO_2	**N/A**	
3. Potential Emissions: **98** lb/hour	**Cap** tons/year	4. Synthetically Limited? [**X**]

5. Range of Estimated Fugitive Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **N/A** Reference:	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **lb/hr – See Appendix A of the PSD Application** **Facility-Wide Cap = 80 TPY**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential hourly emissions are based on 100 percent load at an ambient temperature of 20° Fahrenheit while firing No. 2 diesel fuel oil with a maximum sulfur content of 0.05 percent by weight, based on 95 percent conversion of the sulfur to SO_2.**	

Allowable Emissions: 1 of 2

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **Maximum Fuel Sulfur Content of 0.05 percent by weight**	4. Equivalent Allowable Emissions: **N/A** lb/hour tons/year
5. Method of Compliance (limit to 60 characters): **Custom Fuel Monitoring Schedule (See Appendix PGS-10)**	

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):
Actual annual emissions are limited by the facility-wide caps on SO_2 and NOx

Allowable Emissions: 2 of 2

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
ESCPSD	**N/A**
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: **N/A**
80 TPY	lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
40 CFR Part 75 Appendix D with a 95 percent conversion factor based on the custom fuel monitoring schedule	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	
N/A	

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

Visible Emissions Limitation:

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE10	[**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **2 hours / 24 hours**	

4. Method of Compliance: **EPA Reference Method 9**
5. Visible Emissions Comment (limit to 200 characters): **Excess emissions allowed per Rule 62-210.700(1), F.A.C.**

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

Continuous Monitoring System: Continuous Monitor **1** of **4**

1. Parameter Code: **Flow**	2. Pollutant(s): **Gas Fuel Flow**
3. CMS Requirement: [**X**] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Triad** Model Number: **Orifice Plate** Serial Number: **99-2264**	
5. Installation Date: **6/1/00**	6. Performance Specification Test Date: **9/1/00**
7. Continuous Monitor Comment (limit to 200 characters): **See Attachment EU13-01 (Acid Rain Regulations)**	

Continuous Monitoring System: Continuous Monitor **2** of **4**

1. Parameter Code: **Flow**	2. Pollutant(s): **Oil Fuel Flow Meter**
3. CMS Requirement: [**X**] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Precision Flow, Inc.** Model Number: **Orifice** Serial Number: **A-95033275**	
5. Installation Date: **6/1/00**	6. Performance Specification Test Date: **9/1/00**
7. Continuous Monitor Comment (limit to 200 characters): **See Attachment EU13-01 (Acid Rain Regulations)**	

Emissions Unit Information Section 7 of 7

Continuous Monitoring System: Continuous Monitor **3** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement: [**X**] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Thermo Environmental** Model Number: **42C** Serial Number: **42C-63473-339**	
5. Installation Date: **6/1/00**	6. Performance Specification Test Date: **9/1/00**
7. Continuous Monitor Comment (limit to 200 characters): **See Attachment EU13-01 (NSPS Regulations)**	

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: **CO_2**	2. Pollutant(s): **Carbon Dioxide**
3. CMS Requirement: [**X**] Rule [ ] Other	
4. Monitor Information: Manufacturer: **Siemens** Model Number: **Ultramat 6E** Serial Number: **N1-L5-0290**	
5. Installation Date: **6/1/00**	6. Performance Specification Test Date: **9/1/00**
7. Continuous Monitor Comment (limit to 200 characters): **See Attachment EU13-01**	

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

Supplemental Requirements

1. Process Flow Diagram [**X**] Attached, Document ID: **EU13-02** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU13-03** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [**X**] Attached, Document ID: **EU13-04** [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [**X**] Attached, Document ID: **EU13-05** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [**X**] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID:**EU13-06** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU13-07** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU13-08** [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[**X**] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **EU13-09**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT EU13-01

Sam O. Purdom Generating Station
July 1, 2002

Continuous Monitors

The Unit 8 Combustion Turbine at the Purdom Generating Station is subject to the Acid Rain regulations and required to implement a continuous monitoring program. The pollutants monitored include oxides of nitrogen (NOx) and a diluent gas (CO2).

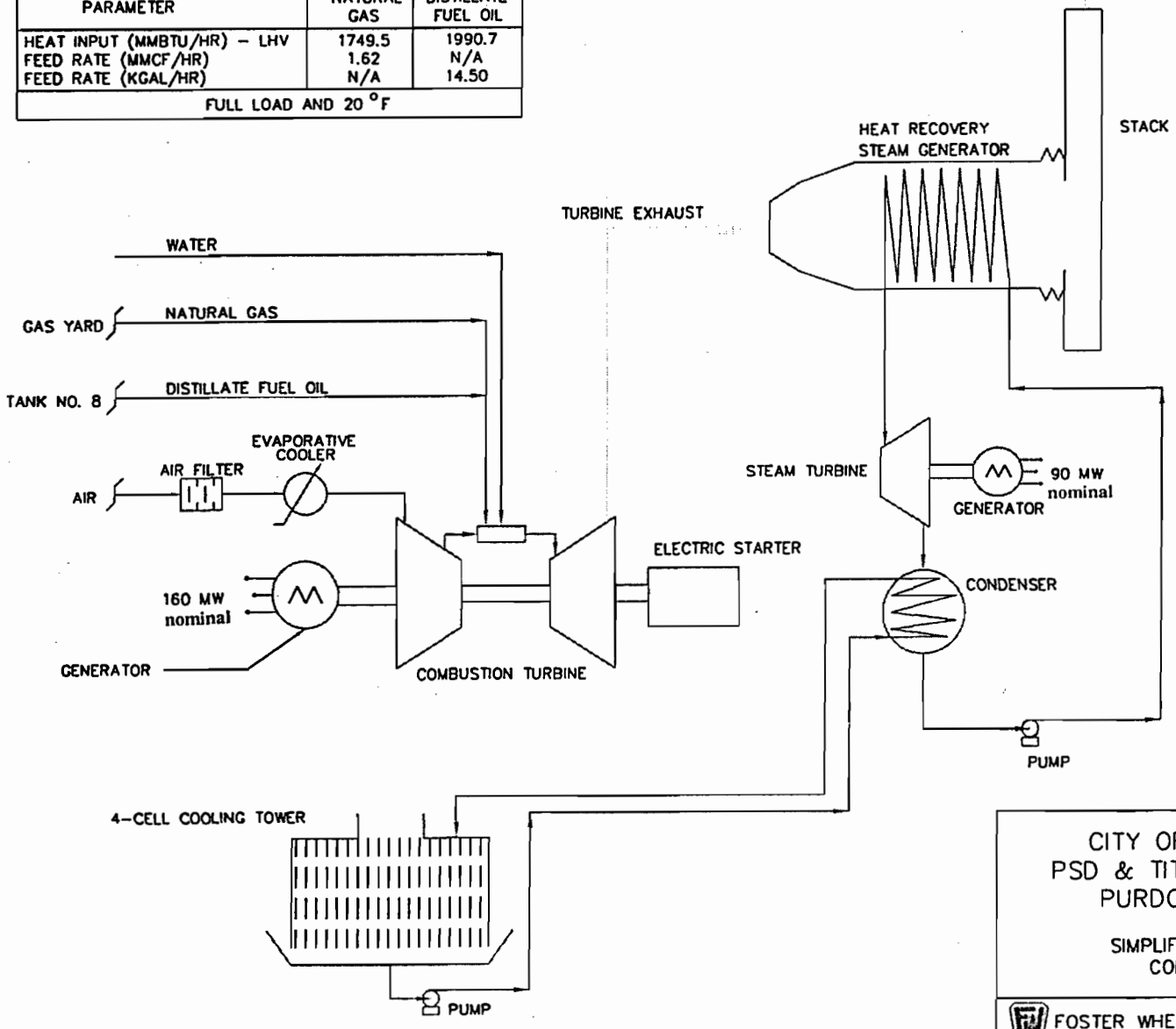
ATTACHMENT EU13-02

PROCESS FLOW DIAGRAM

Sam O. Purdom Generating Station
July 1, 2002

GE OPERATING DATA		
PARAMETER	NATURAL GAS	DISTILLATE FUEL OIL
HEAT INPUT (MMBTU/HR) – LHV	1749.5	1990.7
FEED RATE (MMCF/HR)	1.62	N/A
FEED RATE (KGAL/HR)	N/A	14.50
FULL LOAD AND 20 °F		

EU13 – EXHAUST PARAMETERS
EXHAUST TEMP. – 171 TO 203 °F
STACK HEIGHT – 200'
SO2 EMISSIONS – 80 TPY
NOx EMISSIONS – 467 TPY
OPACITY – 20% EXCEPT AS ALLOWED



CITY OF TALLAHASSEE, FLORIDA
PSD & TITLE V PERMIT APPLICATIONS
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBINED CYCLE – UNIT 8

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A	BY: DJG CKD' BY: DF	CAD FILE NO. PUNIT8.DWG
DATE: 02/27/97 REV: 06/15/01	REV. BY: DJG	FIGURE NO. EU13-02

SOURCE: FOSTER WHEELER ENVIRONMENTAL CORPORATION, 1997

ATTACHMENT EU13-03

FUEL ANALYSIS

Sam O. Purdom Generating Station
July 1, 2002

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in the Unit 8 combined cycle combustion turbine. Actual values may vary. The fuels represented in the analyses include natural gas and Number 2 (0.05% Sulfur) diesel fuel oil.

FGT
Last Updated 5/28/02 7:56

Station Name	Total Sulfur Previous Day Avg ppm 05/26/02	Total Sulfur Previous Day Avg Grains/hcf 05/26/02
Perry 36" Stream #1	2.1	0.132
Perry 30" Stream #2	2.9	0.184
Perry 24" Stream #3	3.3	0.206
Brooker 24" Stream	3.0	0.187

Florida Gas makes no warranty or representation whatsoever as to the accuracy of th
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30 Stream #: Avg Grains/
05/25/02	33	2.128	0.133	3.668	0.229
05/24/02	32	2.366	0.148	4.319	0.270
05/23/02	31	3.001	0.188	4.979	0.311
05/22/02	30	3.906	0.244	4.767	0.298
05/21/02	29	4.803	0.300	4.542	0.284
05/20/02	28	3.510	0.219	4.099	0.256
05/19/02	27	3.311	0.207	3.865	0.242
05/18/02	26	3.893	0.243	5.044	0.315
05/17/02	25	2.135	0.133	2.128	0.133
05/16/02	24	1.986	0.124	1.757	0.110
05/15/02	23	2.757	0.172	2.019	0.126
05/14/02	22	2.210	0.138	1.694	0.106
05/13/02	21	1.901	0.119	1.844	0.115
05/12/02	20	1.827	0.114	1.536	0.096
05/11/02	19	1.820	0.114	1.292	0.081
05/10/02	18	1.848	0.115	1.409	0.088
05/09/02	17	1.656	0.104	1.365	0.085
05/08/02	16	1.871	0.117	1.570	0.098
05/07/02	15	2.676	0.167	2.158	0.135
05/06/02	14	2.819	0.176	2.233	0.140
05/05/02	13	2.428	0.152	1.901	0.119
05/04/02	12	3.045	0.190	2.126	0.133
05/03/02	11	2.941	0.184	2.316	0.145
05/02/02	10	2.381	0.149	2.045	0.128
05/01/02	9	1.863	0.116	1.625	0.102
04/30/02	8	1.648	0.103	1.374	0.086
04/29/02	7	1.746	0.109	1.343	0.084
04/28/02	6	1.709	0.107	1.387	0.087
04/27/02	5	1.640	0.103	1.389	0.087
04/26/02	4	1.957	0.122	2.094	0.131
04/25/02	3	2.698	0.169	3.010	0.188
04/24/02	2	2.592	0.162	2.300	0.144
04/23/02	1	2.344	0.146	2.306	0.144

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daily chromatograph

date requested: Jun 4 2002 1:07PM

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

Chromatograph Report For: 8030 - PERRY STREAM #1

download

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
06/04/2002	1037	0.884	0.301	0.587	95.498	2.578	0.444	0.104	0.093	0.031	0.018	0.049	0	0	0	0
06/03/2002	1036	0.922	0.311	0.587	95.513	2.523	0.434	0.104	0.090	0.032	0.019	0.052	0	0	0	0
06/02/2002	1032	0.851	0.326	0.583	96.138	1.994	0.403	0.101	0.086	0.031	0.018	0.052	0	0	0	0
06/01/2002	1033	0.868	0.365	0.584	95.974	2.044	0.436	0.111	0.094	0.034	0.020	0.054	0	0	0	0
05/31/2002	1033	0.886	0.365	0.585	95.942	2.052	0.438	0.114	0.095	0.035	0.020	0.053	0	0	0	0
05/30/2002	1031	0.851	0.332	0.583	96.229	1.897	0.394	0.103	0.089	0.033	0.019	0.053	0	0	0	0
05/29/2002	1031	0.816	0.327	0.582	96.254	1.922	0.391	0.100	0.082	0.034	0.020	0.055	0	0	0	0
05/28/2002	1032	0.827	0.322	0.583	96.210	1.954	0.408	0.101	0.081	0.030	0.018	0.050	0	0	0	0
05/27/2002	1031	0.844	0.332	0.583	96.175	1.984	0.401	0.095	0.077	0.028	0.017	0.047	0	0	0	0
05/26/2002	1033	0.829	0.315	0.584	96.067	2.059	0.438	0.106	0.086	0.031	0.018	0.051	0	0	0	0
05/25/2002	1034	0.863	0.304	0.584	95.968	2.114	0.443	0.110	0.093	0.033	0.019	0.053	0	0	0	0
05/24/2002	1034	0.856	0.291	0.584	96.013	2.075	0.450	0.112	0.095	0.034	0.020	0.055	0	0	0	0
05/23/2002	1038	0.980	0.277	0.589	95.554	2.244	0.551	0.149	0.116	0.044	0.024	0.062	0	0	0	0
05/22/2002	1041	0.960	0.279	0.590	95.302	2.428	0.612	0.164	0.128	0.046	0.024	0.058	0	0	0	0
05/21/2002	1042	0.891	0.281	0.590	95.359	2.436	0.617	0.161	0.131	0.044	0.023	0.057	0	0	0	0
05/20/2002	1045	0.927	0.301	0.593	94.953	2.674	0.682	0.179	0.146	0.049	0.026	0.063	0	0	0	0
05/19/2002	1043	0.953	0.289	0.592	95.082	2.558	0.665	0.174	0.143	0.048	0.025	0.062	0	0	0	0
05/18/2002	1043	0.929	0.287	0.591	95.131	2.574	0.641	0.166	0.136	0.047	0.025	0.063	0	0	0	0
05/17/2002	1052	0.978	0.294	0.598	94.364	2.955	0.847	0.224	0.179	0.060	0.031	0.070	0	0	0	0
05/16/2002	1048	0.942	0.295	0.594	94.712	2.800	0.758	0.197	0.157	0.052	0.026	0.061	0	0	0	0
05/15/2002	1041	0.864	0.297	0.589	95.287	2.586	0.587	0.143	0.119	0.039	0.022	0.054	0	0	0	0
05/14/2002	1045	0.902	0.298	0.592	94.942	2.718	0.687	0.178	0.144	0.048	0.025	0.058	0	0	0	0
05/13/2002	1044	0.900	0.280	0.591	95.095	2.631	0.657	0.171	0.136	0.047	0.025	0.057	0	0	0	0
05/12/2002	1044	0.905	0.270	0.591	95.121	2.620	0.647	0.169	0.134	0.048	0.026	0.062	0	0	0	0
05/11/2002	1044	0.867	0.280	0.591	95.082	2.736	0.625	0.156	0.127	0.044	0.024	0.058	0	0	0	0
05/10/2002	1047	0.887	0.283	0.593	94.822	2.883	0.679	0.171	0.140	0.048	0.026	0.061	0	0	0	0
05/09/2002	1046	0.889	0.276	0.592	94.963	2.764	0.665	0.170	0.138	0.048	0.026	0.062	0	0	0	0
05/08/2002	1044	0.873	0.281	0.591	95.133	2.659	0.629	0.163	0.130	0.046	0.025	0.061	0	0	0	0
05/07/2002	1042	0.851	0.286	0.589	95.361	2.522	0.578	0.150	0.121	0.044	0.025	0.062	0	0	0	0
05/06/2002	1043	0.877	0.288	0.591	95.168	2.632	0.612	0.160	0.127	0.047	0.026	0.063	0	0	0	0
05/05/2002	1044	0.891	0.298	0.591	95.041	2.764	0.602	0.154	0.121	0.045	0.025	0.059	0	0	0	0
05/04/2002	1039	0.901	0.303	0.588	95.326	2.682	0.473	0.109	0.088	0.037	0.023	0.058	0	0	0	0
05/03/2002	1033	0.958	0.313	0.586	95.605	2.478	0.394	0.088	0.071	0.030	0.018	0.044	0	0	0	0
05/02/2002	1030	0.877	0.294	0.582	96.274	1.957	0.352	0.088	0.071	0.029	0.017	0.041	0	0	0	0
05/01/2002	1029	0.902	0.287	0.582	96.304	1.926	0.345	0.089	0.070	0.027	0.016	0.035	0	0	0	0
04/30/2002	1028	0.895	0.284	0.581	96.362	1.880	0.344	0.087	0.070	0.027	0.015	0.035	0	0	0	0
04/29/2002	1029	0.887	0.291	0.581	96.335	1.900	0.346	0.088	0.074	0.027	0.016	0.037	0	0	0	0
04/28/2002	1029	0.903	0.291	0.582	96.319	1.873	0.362	0.094	0.077	0.028	0.016	0.036	0	0	0	0
04/27/2002	1030	0.917	0.290	0.583	96.176	1.982	0.373	0.097	0.079	0.029	0.017	0.039	0	0	0	0
04/26/2002	1031	0.930	0.282	0.583	96.082	2.068	0.374	0.097	0.078	0.030	0.018	0.041	0	0	0	0
04/25/2002	1030	0.913	0.282	0.583	96.129	2.074	0.357	0.092	0.075	0.027	0.016	0.035	0	0	0	0
04/24/2002	1028	0.872	0.288	0.581	96.387	1.900	0.329	0.085	0.066	0.025	0.014	0.034	0	0	0	0
04/23/2002	1030	0.901	0.278	0.582	96.183	2.045	0.353	0.090	0.074	0.026	0.015	0.035	0	0	0	0
04/22/2002	1030	0.903	0.279	0.582	96.158	2.053	0.359	0.093	0.076	0.028	0.016	0.035	0	0	0	0
04/21/2002	1029	0.921	0.280	0.582	96.221	1.993	0.348	0.091	0.070	0.026	0.015	0.035	0	0	0	0
04/20/2002	1029	0.927	0.274	0.582	96.236	1.976	0.352	0.091	0.071	0.026	0.015	0.033	0	0	0	0

04/19/2002	1029	0.923	0.281	0.582	96.218	1.994	0.344	0.088	0.070	0.027	0.017	0.038	0	0	0	0
04/18/2002	1029	0.930	0.280	0.582	96.260	1.956	0.339	0.087	0.068	0.027	0.016	0.036	0	0	0	0
04/17/2002	1029	0.869	0.295	0.582	96.293	1.957	0.342	0.088	0.070	0.028	0.017	0.042	0	0	0	0
04/16/2002	1034	0.922	0.290	0.586	95.788	2.236	0.455	0.119	0.093	0.034	0.019	0.044	0	0	0	0
04/15/2002	1029	0.923	0.291	0.582	96.206	1.976	0.357	0.092	0.073	0.028	0.016	0.037	0	0	0	0
04/14/2002	1028	0.911	0.291	0.581	96.318	1.921	0.329	0.085	0.067	0.026	0.016	0.036	0	0	0	0
04/13/2002	1027	0.916	0.287	0.581	96.366	1.926	0.299	0.076	0.060	0.023	0.014	0.032	0	0	0	0
04/12/2002	1027	0.929	0.296	0.581	96.310	1.948	0.304	0.077	0.061	0.025	0.015	0.036	0	0	0	0
04/11/2002	1028	0.933	0.302	0.582	96.216	1.980	0.337	0.084	0.066	0.027	0.016	0.039	0	0	0	0
04/10/2002	1031	0.908	0.307	0.583	96.054	2.116	0.359	0.091	0.071	0.030	0.019	0.045	0	0	0	0
04/09/2002	1029	0.860	0.304	0.581	96.273	1.997	0.331	0.083	0.064	0.028	0.017	0.042	0	0	0	0
04/08/2002	1028	0.858	0.306	0.580	96.425	1.874	0.317	0.082	0.063	0.025	0.015	0.036	0	0	0	0
04/07/2002	1033	0.894	0.311	0.584	95.964	2.132	0.413	0.104	0.084	0.033	0.019	0.045	0	0	0	0
04/06/2002	1031	0.912	0.327	0.584	95.902	2.260	0.358	0.084	0.066	0.029	0.018	0.043	0	0	0	0
04/05/2002	1038	1.007	0.298	0.590	95.207	2.616	0.531	0.133	0.102	0.039	0.022	0.046	0	0	0	0
04/04/2002	1038	1.000	0.285	0.589	95.298	2.560	0.515	0.134	0.102	0.039	0.022	0.046	0	0	0	0
04/03/2002	1043	1.002	0.279	0.592	95.012	2.651	0.625	0.166	0.129	0.049	0.027	0.061	0	0	0	0
04/02/2002	1047	0.949	0.286	0.594	94.907	2.649	0.693	0.181	0.156	0.060	0.037	0.082	0	0	0	0
04/01/2002	1045	0.904	0.284	0.592	95.097	2.570	0.652	0.168	0.146	0.058	0.037	0.083	0	0	0	0
03/31/2002	1046	0.921	0.278	0.593	95.063	2.584	0.659	0.171	0.150	0.058	0.036	0.081	0	0	0	0
03/30/2002	1045	0.925	0.289	0.592	95.092	2.552	0.655	0.167	0.147	0.057	0.036	0.081	0	0	0	0
03/29/2002	1047	0.969	0.285	0.594	94.870	2.655	0.698	0.181	0.159	0.060	0.037	0.085	0	0	0	0
03/28/2002	1048	0.929	0.280	0.594	94.910	2.641	0.704	0.182	0.163	0.062	0.039	0.088	0	0	0	0
03/27/2002	1048	0.949	0.281	0.595	94.789	2.713	0.730	0.191	0.164	0.061	0.037	0.085	0	0	0	0
03/26/2002	1044	0.933	0.295	0.592	95.075	2.583	0.643	0.166	0.142	0.054	0.032	0.076	0	0	0	0
03/25/2002	1044	0.922	0.295	0.592	95.131	2.539	0.642	0.167	0.142	0.054	0.032	0.077	0	0	0	0
03/24/2002	1042	0.909	0.288	0.590	95.324	2.463	0.590	0.155	0.128	0.048	0.028	0.068	0	0	0	0
03/23/2002	1038	0.889	0.285	0.588	95.555	2.388	0.523	0.135	0.105	0.041	0.023	0.055	0	0	0	0
03/22/2002	1040	0.839	0.285	0.588	95.574	2.380	0.543	0.142	0.111	0.043	0.025	0.058	0	0	0	0
03/21/2002	1042	0.864	0.281	0.590	95.309	2.524	0.606	0.159	0.124	0.048	0.027	0.060	0	0	0	0
03/20/2002	1040	0.869	0.285	0.588	95.462	2.487	0.530	0.135	0.105	0.043	0.026	0.057	0	0	0	0
03/19/2002	1033	0.919	0.287	0.584	95.757	2.448	0.353	0.083	0.064	0.029	0.019	0.040	0	0	0	0
03/18/2002	1032	0.910	0.282	0.584	95.835	2.400	0.337	0.082	0.065	0.030	0.019	0.041	0	0	0	0
03/17/2002	1032	0.867	0.287	0.583	95.962	2.336	0.324	0.075	0.061	0.028	0.019	0.042	0	0	0	0
03/15/2002	1037	0.899	0.309	0.587	95.550	2.460	0.464	0.115	0.090	0.037	0.022	0.052	0	0	0	0
03/14/2002	1041	0.905	0.311	0.590	95.274	2.546	0.575	0.149	0.115	0.044	0.024	0.057	0	0	0	0
03/13/2002	1033	0.910	0.305	0.584	95.804	2.354	0.369	0.093	0.072	0.031	0.018	0.045	0	0	0	0
03/12/2002	1031	0.946	0.339	0.584	95.763	2.441	0.302	0.071	0.055	0.025	0.016	0.042	0	0	0	0
03/11/2002	1030	0.897	0.323	0.583	95.961	2.303	0.306	0.071	0.056	0.025	0.016	0.042	0	0	0	0
03/10/2002	1030	0.965	0.302	0.584	95.866	2.340	0.307	0.075	0.059	0.026	0.016	0.042	0	0	0	0
03/09/2002	1029	0.918	0.295	0.582	96.125	2.195	0.270	0.069	0.055	0.024	0.014	0.037	0	0	0	0
03/08/2002	1029	0.873	0.287	0.581	96.181	2.180	0.279	0.070	0.056	0.024	0.014	0.036	0	0	0	0
03/07/2002	1028	0.880	0.303	0.581	96.275	2.061	0.277	0.068	0.057	0.025	0.015	0.038	0	0	0	0
03/06/2002	1027	0.781	0.310	0.579	96.625	1.816	0.264	0.065	0.054	0.026	0.017	0.042	0	0	0	0
03/05/2002	1026	0.745	0.321	0.578	96.681	1.842	0.227	0.054	0.046	0.024	0.016	0.044	0	0	0	0
03/04/2002	1028	0.791	0.339	0.580	96.450	1.927	0.280	0.064	0.054	0.029	0.020	0.047	0	0	0	0

Deliverer

August 11, 2001

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 8-06-01
Specific Gravity, 60 °F	ASTM D 4052	Report	0.8525
API, 60 °F		Min 28.0, Max 40.0	34.5
Kinematic Viscosity, 100 °F	ASTM D 445		
cSt		Min 1.8, Max 5.8	2.83
SUS		Max 40	35.4
Flash Point, °F	ASTM D 93	Min 100	159
Pour Point, °C	ASTM D 97	Max 20	-21
Sulfur, mass %	ASTM D 2622	Max 0.050	0.0382
Nitrogen, mass %	ASTM D4629	Max 0.03	0.0137
Distillation, °F			
IBP	ASTM D 86		371.1
5%			398.2
10%			424.4
15%			437.2
20%			449.4
30%			473.0
40%			495.7
50%			515.8
60%			537.2
70%			559.4
80%			585.2
90%		Max 650	619.6
95%			647.1
FBP			665.8
Recovery			97.1
Loss, vol%			1.8
Residue, vol%			1.1
Sediment, mass %	ASTM D 473	Max 0.1	0.01
Water, %	ASTM D 95	Max 0.1	<0.05
Ash, %	ASTM D482	Max 0.0003	<0.0003
Net Heat of Combustion	ASTM D 240		18318.5.0 Btu/lb
MMBTU/Barrel		Min 5.9	5.5
Hydrogen Content, wt %	ASTM D 3701	Min 12.0	13.03
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.09
10% Bottoms		Max 0.25	0.09
Particulate Contamination			
Filterable Dirt (mg/100 mL)			0.04
Silica Content, wt %			<0.01
Algae Growth			Not detected

(OMTWAHJISWGO) page 2 of 2

ATTACHMENT EU13-04

DESCRIPTION OF CONTROL EQUIPMENT

Sam O. Purdom Generating Station
July 1, 2002

Description of Control Equipment

For the Unit 8 Combustion Turbine, the air pollution controls based on the evaluation of Best Available Control Technology (BACT) include the following:

- For the primary control of CO and VOC, good combustion practices which maximize NOx reductions while minimizing CO, VOC, and PM_{10} emissions.

- For the primary control of PM_{10}, trace metals, and total fluorides, combustion inlet air filtration coupled with good combustion practices and fuel quality. The use of clean pipeline quality natural gas and Number 2 (0.05% Sulfur) diesel fuel oil is the most stringent control technology available.

- For the primary control of NOx, combustion controls including dry-low NOx combustors and wet injection techniques coupled with fuel quality.

- For the primary control of SO_2 and H_2SO_4, and the secondary control of NOx and PM_{10}, clean pipeline quality natural gas and Number 2 (0.05% Sulfur) diesel fuel oil is the most stringent control technology available.

The overall control technology is based on the use of clean fuels and good combustion practices which are necessary for the proper operation of the combustion turbine.

ATTACHMENT EU13-05

DESCRIPTION OF STACK SAMPLING FACILITIES

Sam O. Purdom Generating Station
July 1, 2002

Description of Stack Sampling Facilities

The Unit 8 Combustion Turbine at the Purdom Generating Station is required to conduct compliance testing of the stack emissions for oxides of nitrogen and carbon monoxide pursuant to 40 CFR 75 and 40 CFR 60, respectively.

Permanent stack testing facilities have been installed on the Unit 8 exhaust stack. All test facilities are in accordance with Rule 62-297.310(6), Florida Administrative Code. These facilities also meet any Occupational Safety and Health Administration standards described in 29 CFR Part 1910, Subparts D and E. Testing equipment which is not permanently mounted, such as safety harnesses and electrical outlets will be made available to sampling personnel during each sampling event.

ATTACHMENT EU13-06

PROCEDURES FOR STARTUP AND SHUTDOWN

Sam O. Purdom Generating Station
July 1, 2002

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the Unit 8 combined cycle combustion turbine at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the unit. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU13-07

ALTERNATIVE METHODS OF OPERATION

Sam O. Purdom Generating Station
July 1, 2002

Alternative Methods of Operation

The Unit 8 Combustion Turbine located at the Purdom Generating Station has a maximum heat input capacity of 1,659.5 mmBtu/hour LHV at 95°F and produces a nominal 160 MW of electricity. The alternative methods of operation (AMO) associated with the unit are related to the type of fuel being fired and rate of operation. The current AMOs include the following:

- Natural Gas Firing – Maximum Rate of 1467.7 mmBtu/hr (LHV) at 95°F
- No. 2 Fuel Oil Firing – Maximum Rate of 1659.5 mmBtu/hr (LHV) at 95°F

ATTACHMENT EU13-08
ADDITIONAL APPLICABLE REQUIREMENTS

Sam O. Purdom Generating Station
July 1, 2002

Identification of Additional Applicable Requirements

The City of Tallahassee applied to the Florida Department of Environmental Protection (FDEP) on November 14, 2001, for an Air Construction Permit Modification and Title V Air Operating Permit Revising for the Sam O. Purdom Generating Station (See Appendix A). The requested revisions will affect the operation of the Auxiliary Boiler at the Purdom Generating Station.

In response to the requested revisions, the FDEP provided the City of Tallahassee with an *Intent to Issue An Air Construction Permit and Title V Air Operating Permit Revision* (Notice of Intent) on June 3, 2002 (See Appendix A).

The deadline for submitting the Title V Renewal Application will expire prior to the conclusion of the required notice and comment period associated with the Notice of Intent.

Therefore, the information contained in this Title V Renewal Application is based on the data and allowable rates contained in current Operating Permit No. 1290001-003-AV, which expires on December 31, 2002.

The City of Tallahassee requests that the revisions requested by the City of Tallahassee and approved in the above referenced Notice of Intent be incorporated into this Title V Permit Renewal Application.

In addition, the City of Tallahassee requests the following revisions to be incorporated into the Title V Operating Permit:

F.1. All of the terms and conditions of permit number PSD-FL-239/PA97-35 are a part of this permit (see attachment PSD-FL-239/PA97-35).

~~Operation of combustion turbine No. 8 beyond the time frames established by permit number PSD-FL-239/PA97-35 is allowed, and the conditions of this section apply, only after the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the combined cycle combustion turbine was completed in accordance with permit number PSD-FL-239/PA97-35 and 2) the unit has been tested and compliance with the terms and conditions contained within permit number PSD-FL-239/PA97-35 has been properly demonstrated.~~

~~[Rules 62-212.400(7)(b) and 62-213.420(1)(a)(5)., F.A.C.]~~

ATTACHMENT EU13-09
ACID RAIN APPLICATION

Sam O. Purdom Generating Station
July 1, 2002

Phase II Acid Rain Part Application

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

This submission is: ☐ New ☐ Revised **X** Renewal

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

Plant Name: **Sam O. Purdom Generating Station** State: **Florida** ORIS Code: **689**

STEP 2 Enter the unit ID# for each affected unit and indicate whether a unit is being repowered and the repowering plan being renewed by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e.

a	b	c	d	e
Unit ID#	Compliance Plan: Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	Compliance Plan: Repowering Plan	New Units: Commence Operation Date	New Units: Monitor Certification Deadline
Boiler No. 7	Yes	**No**		
Combined Cycle Combustion Turbine (No. 8)	Yes	**No**		
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit

☐ For each unit that is being repowered, the Repowering Extension Plan form is included.

P 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Plant Name: Sam O. Purdom Generating Station

Standard Requirements

Acid Rain Part Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Plant Name: Sam O. Purdom Generating Station

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

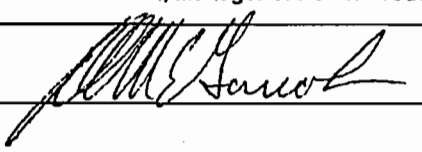
(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8 or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_X averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

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

Name: **Robert E. McGarrah, Manager of Power Production, City of Tallahassee**	
Signature: 	Date: **July 1, 2002**

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

June 3, 2002

Mr. Robert E. McGarrah, Production Superintendent
City of Tallahassee - Electric Utilities
300 South Adams Street
Tallahassee, Florida 32301

Re: Sam O. Purdom Generating Station
Draft Air Construction Project No. 1290001-005-AC
{Modification of Permit No. PSD-FL-239 (Unit 8) and Permit No. 1290001-002-AC (Auxiliary Boiler)}
DRAFT Title V Air Operation Permit Revision Project No. 1290001-006-AV
{Revision to Title V Air Operation Permit No. 1290001-003-AV}

Dear Mr. McGarrah:

One copy of the Technical Evaluation and Preliminary Determination, the combined Public Notice, the Draft Air Construction Permit Modifications, and the DRAFT Title V Air Operation Permit Revision for the Sam O. Purdom Generating Station located at 667 Port Leon Drive in St. Marks, Wakulla County, Florida, is enclosed. The permitting authority's "Intent to Issue Air Construction Permit Modifications and Title V Air Operation Permit Revision" and the "Public Notice of Intent to Issue an Air Construction Permit and Title V Air Operation Permit Revision" are also included.

electronic version of the DRAFT Title V Air Operation Permit Revision has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

"http://www.dep.state.fl.us/air/permitting/tv/TitleVSearch.asp"

The "Public Notice of Intent to Issue Air Construction Permit Modifications and Title V Air Operation Permit Revision" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within seven (7) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Jeff Koerner, at the above letterhead address. If you have any other questions, please contact Mr. Koerner, at 850/921-9536.

Sincerely,

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/AAL/SMS/jfk

Enclosures

U.S. EPA/Region 4 (INTERNET E-mail)

In the Matter of an
Application for Permits by:

City of Tallahassee - Electric Utilities
300 South Adams Street
Tallahassee, Florida 32301

Air Construction Permit Project No. 1290001-005-AC
DRAFT Title V Permit Revision No. 129001-006-AV
Sam O. Purdom Generating Station
Wakulla County, Florida

Authorized Representative/Responsible Official
Mr. Robert E. McGarrah, Production Superintendent

INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND TITLE V AIR OPERATION PERMIT REVISION

The City of Tallahassee (applicant) applied on November 14, 2001 for Air Construction Permit Modifications and Title V Air Operation Permit Revision for the Sam O. Purdom Generating Station located at 667 Port Leon Drive in St. Marks, Wakulla County, Florida. The Florida Department of Environmental Protection (permitting authority) gives notice of its intent to issue Air Construction Permit Modifications and Title V Air Operation Permit Revision for the Title V source detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below. Copies of the Draft Air Construction Permit Modifications and DRAFT Title V Air Operation Permit Revision are attached.

Permit Project No. 1290001-005-AC involves the modification of two air construction permits; Permit No. PSD-FL-239 for the Unit 8 combined cycle gas turbine and Permit No. 1290001-002-AC for the auxiliary boiler. The applicant requested the following changes to the Unit 8 permit: clarify that the heat input rate is a function of the compressor inlet temperature and not necessarily ambient temperature; revise the temperature basis for the heat input rate from 95° F to 59° F; increase the heat input rate by approximately 8.5% for gas firing and 6.6% for distillate oil firing; allow periods of excess emissions resulting from major tuning of the dry low NOx combustion system for up to 72 hours per year; increase authorized periods of excess emissions from 4 to 6 hours per day during days with cold startups; and increase authorized periods of excess emissions from 2 to 4 hours per day during days with hot startups. For the auxiliary boiler permit, the applicant requested authorization to operate the auxiliary boiler when either Unit 7 or Unit 8 is not in operation. Lastly, the applicant requested a concurrent revision of Title V Air Operation Permit No. 1290001-003-AV to: incorporate the above requests; revise the permit subsection regulating Boilers 5 and 6 to reflect permanent shutdown; and revise the emissions unit ID number for the Unit 8 combined cycle gas turbine to be consistent with the state's database. The revision will be issued as DRAFT Title V Air Operation Permit No. 1290001-006-AV.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212 and 62-213. This source is not exempt from construction and Title V permitting procedures. The permitting authority has determined that Air Construction Permit Modifications and Title V Air Operation Permit Revision are required to modify and commence or continue operations at the facility.

The permitting authority intends to issue the Air Construction Permit Modifications and the Title V Air Operation Permit Revision based on the belief that reasonable assurances have been provided to indicate that the construction activity and operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Construction Permit Modifications and Title V Air Operation Permit Revision" ("Public Notice"). The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400, within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

The permitting authority will issue the Air Construction Permit Modifications and the PROPOSED Title V Air Operation Permit Revision and subsequent FINAL Title V Air Operation Permit Revision, in accordance with the conditions of the attached Draft Air Construction Permit Modifications and the DRAFT Title V Air Operation Permit Revision unless a

response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Air Construction Permit Modifications and the Title V Air Operation Permit Revision issuance actions for a period of 30 (thirty) days from the date of publication of the "Public Notice". Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in significant changes, the permitting authority shall issue a revised Draft Air Construction Permit and a revised DRAFT Title V Air Operation Permit Revision and require, if applicable, another "Public Notice".

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or

..aiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and, (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit revision. Any petition shall be based only on objections to the permit revision that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Intent to Issue an Air Construction Permit and Title V Air Operation Permit Revision" (including the combined "Public Notice", the Draft Air Construction Permit Modifications and the DRAFT Title V Air Operation Permit Revision) and all copies were sent by certified mail* or U.S. mail before the close of business on 6/6/02 to the persons listed:

Mr. Robert E. McGarrah, City of Tallahassee*
Mr. Karl Bauer, City of Tallahassee
Ms. Jennette Curtis, City of Tallahassee
Ms. Sandra Veazey, NWD
Mr. Hamilton Oven, DEP Siting Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

Victoria Gibson (Clerk) June 6, 2002 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATIONS AND TITLE V AIR OPERATION PERMIT REVISION

Florida Department of Environmental Protection

Draft Air Construction Permit Project No. 1290001-005-AC
{Modification of Permit No. PSD-FL-239 (Unit 8) and Permit No. 1290001-002-AC (Auxiliary Boiler)}
DRAFT Title V Air Operation Permit Revision Project No. 1290001-006-AV
{Revision to Title V Air Operation Permit No. 1290001-003-AV}

Sam O. Purdom Generating Station
Wakulla County, Florida

The Florida Department of Environmental Protection (permitting authority) gives notice of its intent to issue Air Construction Permit Modifications and Title V Air Operation Permit Revision to the City of Tallahassee (applicant) for the Sam O. Purdom Generating Station located at 667 Port Leon Drive in St. Marks, Wakulla County, Florida. The applicant's authorized representative and responsible official is Mr. Robert E. McGarrah, Production Superintendent. The applicant's address is: City of Tallahassee - Electric Utilities, 300 South Adams Street, Tallahassee, Florida 32301.

Permit Project No. 1290001-005-AC involves the modification of two air construction permits; Permit No. PSD-FL-239 for the Unit 8 combined cycle gas turbine and Permit No. 1290001-002-AC for the auxiliary boiler. The applicant requested the following changes to the Unit 8 permit: clarify that the heat input rate is a function of the compressor inlet temperature and not necessarily ambient temperature; revise the temperature basis for the heat input rate from 95° F to 59° F; increase the heat input rate by approximately 8.5% for gas firing and 6.6% for distillate oil firing; allow periods of excess emissions resulting from major tuning of the dry low NOx combustion system for up to 72 hours per year; increase authorized periods of excess emissions from 4 to 6 hours per day during days with cold startups; and increase authorized periods of excess emissions from 2 to 4 hours per day during days with hot startups. For the auxiliary boiler permit, the applicant requested authorization to operate the auxiliary boiler when either Unit 7 or Unit 8 is not in operation. Lastly, the applicant requested a concurrent revision of Title V Air Operation Permit No. 1290001-003-AV to: incorporate the above requests; revise the permit subsection regulating Boilers 5 and 6 to reflect permanent shutdown; and revise the emissions unit ID number for the Unit 8 combined cycle gas turbine to be consistent with the state's database. The Title V revision is issued as DRAFT Title V Air Operation Permit No. 1290001-006-AV.

The changes are expected to result in slight increases in potential emissions of the following pollutants: 19.52 tons of carbon monoxide per year; 3.6 tons of particulate matter per year; and 4.8 tons of volatile organic compounds per year. Although the Unit 8 combined cycle gas turbine is a Phase II Acid Rain Unit, potential emissions of nitrogen oxides and sulfur dioxide remain unchanged due to enforceable emissions caps. A review for the Prevention of Significant Deterioration is not required because any increases are well below the significant emission rate thresholds.

The permitting authority will issue the Air Construction Permit Modifications and the PROPOSED Title V Air Operation Permit Revision and subsequent FINAL Title V Air Operation Permit Revision, in accordance with the conditions of the Draft Air Construction Permit Modifications and the DRAFT Title V Air Operation Permit Revision unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Draft Air Construction Permit Modifications and the DRAFT Title V Air Operation Permit Revision issuance actions for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in significant changes, the permitting authority shall issue revised Draft Air Construction Permit Modifications and a revised DRAFT Title V Air Operation Permit Revision and require, if applicable, another "Public Notice".

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (...ng) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as ...blished at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit revision. Any petition shall be based only ...objections to the permit revision that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:
Bureau of Air Regulation
Florida Department of Environmental Protection
111 S. Magnolia Drive, Suite 4
Tallahassee, FL 32301
Telephone: 850/488-0114

Affected District Office
Northwest District Office
Florida Department of Environmental Protection
160 Governmental Center
Pensacola, FL 32501-5794
Telephone: 850/595-8300

The complete project file includes the Technical Evaluation and Preliminary Determination, the Draft Air Construction Permit Modifications, the DRAFT Title V Air Operation Permit Revision, the application, and the information submitted by ...e responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact ...permit engineer at the above address, or call 850/488-0114, for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

Purdom Generating Station
DRAFT Permit No. 1290001-006-AV
Revision of Title V Air Operation Permit No. 1290001-003-AV

PERMITTEE

City of Tallahassee
Sam O. Purdom Generating Station
Facility ID No. 1290001
Wakulla County, Florida

FACILITY DESCRIPTION

The facility consists of a fossil fuel-fired steam generator with steam-electrical turbine, a combined cycle gas turbine, two simple cycle combustion turbines, and one gas-fired auxiliary boiler. The total combined electrical generating capacity from the facility is a nominal 319 megawatts (MW), of which 134 megawatts are steam-generated electrical power and 185 megawatts are direct, shaft-driven electrical power from the combustion turbines. The facility-wide emissions of nitrogen oxides and sulfur dioxide are capped at 467 and 80 tons per year, respectively. The facility is considered a major source of air pollution with respect to Title III (hazardous air pollutants), Title IV (Acid Rain), Title V (operating permits), and the Prevention of Significant Deterioration (PSD). A description of each emissions unit follows.

Emissions Units 001 through 006: The emissions units are boilers that have been permanently shutdown.

Emission Units 007: The emissions unit is a Riley Stoker Corporation steam generator (Model No. RX-33), which is designated by the plant as "Unit 7". It is rated at a maximum heat input of 621 MMBtu per hour when fired with natural gas and/or No. 2 thru No. 6 fuel oil. It nominally produces 500,000 pounds of steam per hour to run a nominal 44 MW turbine-generator. It is a Phase II Acid Rain unit.

Emission Units 008 and 009: The emissions units are simple cycle combustion turbines manufactured by Westinghouse (Model No. W171G) and are designated as "Combustion Turbine Number 1" and "Combustion Turbine Number 2". Each unit is rated at a maximum heat input of 228 MMBtu per hour when fired with natural gas and/or No. 2 fuel oil. Each combustion turbine powers a nominal 12.3 MW generator. Emissions from the combustion turbines are uncontrolled.

Emission Units 010: The emissions unit includes miscellaneous fugitive sources of volatile organic compounds, such as plant painting operations.

Emission Units 011: The emission unit is a natural gas-fired auxiliary boiler (Kewanee Model No. H3S-400-G) rated at a maximum heat input rate of 16.74 MMBtu per hour. The unit is used as a source of steam for plant operations.

Emission Units 012: The emissions unit includes miscellaneous general purpose internal combustion engines.

Emission Units 011: The emissions unit includes miscellaneous emergency generators.

Emission Units 014: This emissions unit is a combined cycle combustion turbine system designated as Unit 8. It consists of a nominal 160 MW General Electric Series 7FA combustion turbine, an unfired heat recovery steam generator, and a nominal 90 MW steam-electrical turbine. NOx emissions are controlled with dry low NOx combustion when firing natural gas and water injection when firing distillate oil. An evaporative cooling system can reduce the compressor inlet air temperature when needed. It is a Phase II Acid Rain unit.

PROJECT DESCRIPTION

Initial Title V Permit No. 1290001-001-AV became effective on January 1, 1998. On August 7, 1998, Project No. 1290001-003-AV revised the initial permit to incorporate permit number PSD-FL-239/PA97-36, which

authorized construction of Unit 8, a new combined cycle combustion turbine. Project No. 1290001-006-AV is a revision to incorporate Permit Project No. 1290001-005-AC, which modified air construction Permit No. PSD-FL-239 for Unit 8 and modified air construction Permit No. 1290001-002-AC for the auxiliary boiler.

For Unit 8, the following changes are:

- Clarify that the heat input rate is a function of the compressor inlet temperature and not necessarily ambient temperature. The unit includes an evaporative cooling system to lower the compressor inlet temperature during warm weather to provide additional power. Revise the temperature basis for the heat input rate from 95° F to 59° F.
- Increase the heat input rate by approximately 8.5% for gas firing and 6.6% for distillate oil firing. As constructed, the General Electric 7FA gas turbine is capable of higher heat input rates and power production.
- Allow periods of excess emissions resulting from major tuning of the dry low NOx combustion system (up to 72 hours per year). A "major tuning session" would occur after a combustor change-out, a major repair to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.
- Increase authorized periods of excess emissions from 4 to 6 hours per day during days with cold startups. A cold startup is startup after the combined cycle unit has been down for more than 48 hours. This clarifies that it may be necessary to operate the gas turbine at low loads for up to four hours to bring all components up to operating temperatures. It also recognizes that other incidents could occur within the same day, such as a malfunction, fuel switch, shutdown, or hot startup.
- Increase authorized periods of excess emissions from 2 to 4 hours per day during days with a hot startup. This recognizes that multiple incidents could occur within the same day, such as a hot startup, malfunction, fuel switch, or shutdown.

For the auxiliary boiler, the original construction permit limited operation to periods when Units 5, 6, and 7 were not in operation. Units 5 and 6 have been permanently shutdown. The change authorizes operation when either Unit 7 or Unit 8 is not in operation.

Conditions throughout the Title V permit were revised to be consistent with the above modifications. The emissions unit ID number for Unit 8 was corrected from "012" to "014" to be consistent with the state database. In addition, the specific conditions for Units 5 and 6 were deleted because these units have been permanently shutdown. The section was kept as a placeholder and text was added about the permanent shutdowns. This section will be removed entirely during the Title V renewal project.

AGENCY ACTION

The Title V air operation permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213 of the Florida Administrative Code (F.A.C.).

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

PROJECT

Permit Project No. 1290001-005-AC
Modification of Air Permit No. PSD-FL-239 (Unit 8)
Modification of Permit No. 1290001-002-AC (Auxiliary Boiler)

Permit Project No. 1290001-006-AV
Revision of Title V Air Operation Permit No. 1290001-003-AV

Miscellaneous Permit Modifications

COUNTY

Leon

APPLICANT

City of Tallahassee, Electric Utilities
Sam O. Purdom Generating Station
ARMS Facility ID No. 1290001

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

May 31, 2001

(Filename: 1290001-005-AC TEPD.doc)

1. GENERAL INFORMATION

Applicant Name and Address

City of Tallahassee, Electric Utilities
300 South Adams Street
Tallahassee, Florida 32301

Authorized Representative/Responsible Official:
Mr. Robert E. McGarrah, Production Superintendent

Processing Schedule

11/14/01 Received application.
12/05/01 Requested additional information.
02/27/02 Received partial additional information.
04/16/02 Received remaining additional information; complete.

Facility Description and Location

The City of Tallahassee operates an electric power plant (SIC No. 4911) located at 667 Port Leon Drive in St. Marks, Wakulla County, Florida. The UTM coordinates are Zone 16, 769.5 km East, and 3339.97 km North (Latitude: 30° 09' 47" North and Longitude: 84° 12' 10" West). This is an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to the Florida and National Ambient Air Quality Standards (NAAQS).

Regulatory Categories

Title III: Based on the Title V permit, the facility is a major source of hazardous air pollutants (HAP).

Title IV: The facility operates emissions units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution because potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

PSD: The existing facility is located in an area currently designated as "attainment" or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. The plant is considered a "fossil fuel fired steam electric plant of more than 250 million BTU per hour of heat input", which is one of the 28 PSD source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a major source of air pollution with respect to Rule 62-212.400, F.A.C., the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: The facility operates units subject to the New Source Performance Standards of 40 CFR 60 (Subpart GG for the gas turbine and Subpart Dc for the auxiliary boiler.).

2. PROJECT DESCRIPTION

The proposed changes will affect the following emission units.

EU No.	Emissions Unit Description
005	Unit 5: 300 MMBtu per hour boiler (Permanently Shutdown)
006	Unit 6: 300 MMBtu per hour boiler (Permanently Shutdown)
007	Unit No. 7: 621 MMBtu per hour boiler
011	Auxiliary Boiler: 17 MMBtu per hour boiler
014	Unit No. 8: 1897 MMBtu per hour combined cycle combustion turbine

The applicant requests the following changes to Permit No. PSD-FL-239 for the Unit 8 combined cycle gas turbine.

1. Heat Input Rate: Clarify that the heat input rate is a function of compressor inlet temperature and not necessarily ambient temperature. Revise the heat input rate based on the unit as constructed.

2. Tuning: Authorize excess emissions resulting from major DLN tuning of the dry low NOx combustion system for no more than 72 hours per year. NOx emissions from such periods would still be included to demonstrate compliance with the facility-wide emission cap.

3. Cold Startup: Authorize up to 4 hours of excess emissions per day resulting from cold startups. For any day that includes a cold startup, authorize up to 6 hours of excess emissions per day resulting from all startups, shutdowns, malfunctions, and fuel switching. For any day that does not include a cold startup, authorize up to 4 hours of excess emissions per day resulting from all startups, shutdowns, malfunctions, and fuel switching.

The applicant requests the following change to Permit No. 1290001-002-AC for the auxiliary boiler.

4. Auxiliary Boiler: Revise permit condition to allow the auxiliary boiler to operate when either Unit 7 or Unit 8 is not in operation.

The applicant also requests the following changes to air Permit No. 1290001-003-AV.

5. Title V Revision: Simultaneous revision of the Title V Permit to incorporate the above changes.

3. DEPARTMENT REVIEW

Heat Input Rate (Permit No. PSD-FL-239)

For this project, the applicant requests the following changes to the original PSD air permit for Unit 8.

- Revise the term "ambient temperature" to "compressor inlet temperature";
- Revise the temperature basis for the maximum heat input rates from 95° F to 59° F;
- Revise the maximum heat input rate for gas firing from 1,467.7 to 1696 MMBtu/hour; and
- Revise the maximum heat input rate for distillate oil firing from 1,659.5 to 1897 MMBtu/hour.

The change in terms from "ambient" to "compressor inlet" temperature is acceptable. If the heat input rates are first corrected for the requested change in compressor inlet temperature (95° F to 59° F), then the equivalent heat input rates would be 1563 MMBtu/hour (gas firing) and 1780 MMBtu (oil firing). Therefore, the request to increase the heat input rates is actually from 1563 to 1696 MMBtu/hour (gas firing) and from 1780 to 1897 MMBtu/hour (oil firing). This is approximately an 8.5% and a 6.6% increase over the previous maximum heat input rates for gas and oil firing, respectively.

Manufacturers guarantee maximum power production for a specific gas turbine model with a corresponding maximum heat input rate. Frequently, actual power production and maximum heat input rates are slightly higher than the initial guarantee. In this particular case, the application was based on an earlier version of the Frame 7FA (Model No. MS7231) rather than the actual delivered unit, which was the Model No. PG7241(FA). Recent permit applications for the Model No. PG7241(FA) shows General Electric specifications of more than 1600 MMBtu/hour for gas firing and more than 1800 MMBtu per hour for oil firing.

Construction on the Unit 8 combined cycle gas turbine was completed in 2000. Based on information in the Department's Air Resource Management System, the unit operated approximately 3 months in 2000, including the initial shakedown operation. In 2001, the unit operated approximately 12 months. The unit has begun commercial operation, but has less than 24 months of actual commercial operation. The proposed change does not require any physical change to the unit.

For the original project, the Department made BACT determinations for CO, NOx, PM/PM10, and SO_2. The requested change in heat input would not have triggered PSD review for any additional pollutants with respect to the original project. The applicant does not request any changes to the NOx and SO_2 emissions caps established in the initial PSD permit. Based on additional fuel consumption to achieve the requested heat input, the applicant estimates the following emission increases: 19.52 tons per year of carbon monoxide; 3.6 tons per year of particulate matter; and 4.8 tons per year of volatile organic compounds. The Department also estimated annual emissions increases due to the increased heat input as shown in Attachment A. The increases are well below the PSD significant emission rates identified in Table 62-212.400-2, F.A.C. Therefore, the requested change in heat input does not trigger a PSD review.

The Purdom Generating Station is located within 1 km of the St. Marks National Wilderness Area and approximately 28 km from the Bradwell Bay National Wilderness Area. Due to the proximity of these federally protected areas, the applicant performed an air quality analyses for the original PSD permit application. The Department reviewed the original analyses to determine whether additional modeling would be necessary to evaluate possible impacts from the small increase in heat input. The following tables summarize the PSD increment analyses as provided in the original project's public notice.

Table 3A. Summary of Increment Analysis for PSD Class II Areas (From Initial PSD Project Review)
Multi-Source Modeling Impacts to Areas in the Vicinity of the Plant

Pollutant	Averaging Period	Increment Consumed With Project, ug/m^3	Allowable Class II Increment, ug/m^3	% Increment Consumed
PM10	24-hour	3.3	30	11%
	Annual	0.3	17	2%
SO2	3-hour	14.4	512	3%
	24-hour	2.4	91	3%
	Annual	0.0	20	0%
NO2	Annual	6.2	25	25%

Table 3B. Summary of Increment Analysis for PSD Class I Areas (From Initial PSD Project Review)
Multi-Source Modeling Impacts to the St. Marks and Bradwell Bay National Wilderness Areas

Pollutant	Averaging Period	Increment Consumed With Project, ug/m^3		Allowable Class I Increment, ug/m^3	% Increment Consumed With Project	
		St. Marks	Bradwell Bay		St. Marks	Bradwell Bay
PM10	24-hour	0.7	0.0	8	9%	0%
	Annual	0.1	0.2	4	2.5%	5%
SO2	3-hour	10.7	16.9	25	43%	68%
	24-hour	2.7	4.9	5	54%	98%
	Annual	0.0	0.0	2	0%	0%
NO2	Annual	0.9	0.6	2.5	36%	24%

As shown in Table 3A, the initial multi-source modeling analysis predicts increment consumption in the Class II areas to be well below the allowable levels for all pollutants. In Table 3B, the initial multi-source modeling analysis predicts increment consumption in the St. Marks National Wilderness Area and the Bradwell Bay National Wilderness Area to be below allowable PSD Class I increment levels for all pollutants. However, the analysis predicts that 98% of the allowable PSD Class I increment will be consumed for the 24-hour averaging period in the Bradwell Bay National Wilderness Area, which is farthest from the Purdom site. Taking a closer look at the analysis, it indicates that Purdom Unit 8 was less than the significance criterion for SO2 and contributes less than 0.00001 ug/m^3 to this overall impact. (See Tables 7-4 through 7-8 in the original PSD application.) Therefore, the requested change in heat input rates would have a negligible affect on the Bradwell Bay National Wilderness Area and no further modeling for SO2 was required.

To satisfy concerns regarding increases in emissions of carbon monoxide and particulate matter, the applicant performed an additional modeling analysis to determine whether the requested heat input increase would result in an impact of greater than I ug/m^3 in the St. Marks National Wilderness Area. This is a Class I area that is less than 10 km from the Purdom site. The analysis used EPA's ISC3 modeling software (version 02035) and the preprocessed meteorological data from the National Weather Service for the years 1985 to 1989. The analysis also used surface data from Tallahassee Station No. 93805 and mixing height data from Apalachicola Station No. 12832. The following table summarizes the modeling results.

Table 3C. Purdom Unit 8 Impacts on St. Marks National Wilderness Area (Class I Area)

Pollutant	Input Data Source	Emission Rate grams/second	Maximum Refined Concentration, ug/m^3
Carbon Monoxide	Original PSD Application	24.21	6.58
	Proposed Project	25.18	6.64
	Difference	0.97	0.06

articulate Matter	Original PSD Application	2.14	0.582
	Proposed Project	2.28	0.601
	Difference	0.14	0.019

Analysis is based on the following worst-case parameters:
Meteorological Year: 1988
Unit Load: 50% capacity
Compressor Inlet Temperature: 20° F for gas firing and 95° for oil firing

The analysis shows that the requested increase in heat input will not result in an impact greater than 1 ug/m^3 in the nearby St. Marks National Wilderness Area. Emissions of nitrogen oxides and sulfur dioxide will not increase due to the federally enforceable emissions caps; therefore, no analysis of these pollutants was required. The Department approves the increase in heat input provided the permittee continues to tune the gas turbine in accordance with the manufacturer's specifications.

Tuning (Permit No. PSD-FL-239)

During the initial shakedown and operation of a lean-premix gas turbine, it is necessary to perform major tuning sessions of the dry low NOx combustion system. The tuning process involves stepping the unit through various load conditions and making necessary adjustments to achieve the operational specifications established by the manufacturer, which is intended to result efficient combustion. During this process, the unit may experience elevated emission levels until the system is properly tuned. Such major tuning sessions would be repeated at scheduled maintenance intervals and after a major repair or combustor change-out. Although tuning sessions typically last only a few hours during a single day, it is possible that several days of tuning could be necessary to correct a problem.

The applicant requests the authorization of excess emissions resulting from major tuning sessions, which would occur no more than 72 hours during any given year. Again, scheduled and unscheduled tuning sessions are necessary to return the unit to the manufacturer's specifications. The benefit of performing such tuning sessions is to increase combustion performance as well as restore dry low-NOx combustion system parameters in accordance with the manufacturer's specifications. Therefore, the Department approves the request and the PSD permit will be revised accordingly. However, all valid NOx CEMS data must be used to determine compliance with the NOx emission cap.

Startup (Permit No. PSD-FL-239)

The original PSD permit for Unit 8 included the following condition (C.1):

> "Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration."

For a day with a cold startup, the applicant requests up to 6 hours of excess per day to allow for multiple linked events (cold startup, malfunctions, shutdown, etc.). Similarly, the applicant requests 4 hours of excess emissions per day for days with a hot startup. Although the likelihood of such multiple occurrences is relatively low, the Department does recognize the possibility. The Department approves the request and will modify the PSD air permit accordingly, provided the applicant meets the following three provisions:

- NOx emissions data shall not be excluded from the annual NOx emissions cap. This is necessary to maintain an enforceable emissions cap.
- The permittee shall maintain a NOx monitor availability of at least 95%. This is necessary to ensure that Unit 8 is demonstrating compliance with the NOx BACT standards and the NOx emissions cap based on its actual emissions.
- The permittee shall submit quarterly reports that identify the amount of NOx data exclusion, malfunctions and corrective actions, and monitor downtime. The reports will be used to demonstrate compliance with the authorized periods of data exclusion as well ensure that malfunctions and frequent startups do not become routine methods of operation.

xiliary Boiler (Permit No. 1290001-002-AC)

December of 1996, the Department's Northwest District issued air construction permit No. 1290001-002-AC for an auxiliary steam boiler with a maximum heat input rate of 16.7 MMBtu/hour fired exclusively with natural gas and limited to no more than 2000 hours per year of operation. Although the boiler was not permitted subject to PSD preconstruction review, BACT determinations were made for particulate matter and sulfur dioxide in accordance with state Rule 62-296.406, F.A.C. The initial construction permit contained the following text in Condition No. 6.

> "This emissions unit shall only be operated as an auxiliary source of steam when the existing steam generating units (boilers 5, 6, & 7) are not operating."

Previous Units 5 and 6 are now permanently shutdown. The applicant requests that this condition be revised to allow operation of the auxiliary steam boiler when either Unit 7 or Unit 8 are not operating. The applicant performed additional modeling to evaluate the impacts for carbon monoxide and particulate matter resulting from the different operating scenarios with regard to the St. Marks National Wilderness Area. No additional modeling was performed for nitrogen oxides of sulfur dioxide because the current project is not believed to result in increased emissions of these pollutants due to the federally enforceable emissions caps included in the PSD permit for Unit 8. The following table summarizes the applicant's modeling analysis.

Table 3C. CO and PM Impacts at Nearby St. Marks National Wilderness Area (Class I Area)

Pollutant	Averaging Period	Operating Scenario	Maximum Refined Concentration, ug/m^3
CO	24-hour	Units 7 and 8	7.75
		Auxiliary Boiler and Unit 7	4.90
		Auxiliary Boiler and Unit 8	6.68
PM	24-hour	Units 7 and 8	4.84
		Auxiliary Boiler and Unit 7	4.58
		Auxiliary Boiler and Unit 8	0.86

As shown in the above table, the requested revision will not result in any impacts greater than those allowed by the existing permit. The Department approves this request and the initial air construction permit will be revised accordingly.

Permit Project No. 1290001-006-AV (Revision to Title V Permit Air Operation Permit No. 1290001-003-AV)

The applicant requests a simultaneous revision of the Title V operating permit to incorporate the above changes. The Department approves the request and will provide a single public notice package for the three revised permits. The public notice will allow 30 days for public comment. If no administrative hearing is requested and no comments are received that would result in substantial changes, the two air construction permits (PSD-FL-239A and 1290001-002a-AC) will be issued as final permitting actions. The Title V revision will continue to the "proposed permit" phase of the Title V permitting process.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permits. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the specific conditions of the draft permits. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. Deborah Galbraith was the project meteorologist responsible for review of the air quality analyses. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert E. McGarrah, Production Superintendent
City of Tallahassee - Electric Utilities
300 South Adams Street
Tallahassee, Florida 32301

Re: City of Tallahassee – Purdom Generating Station
Project No. 1290001-005-AC
Modification of Permit No. PSD-FL-239, Unit 8 Heat Input Increase and Excess Emissions Conditions
Modification of Permit No. 1290001-002-AC, Operation of Auxiliary Boiler with Unit 7 or Unit 8

Dear Mr. McGarrah:

On November 14, 2001, the Department received your request to make several changes to the original PSD permit for Unit 8 and the original air construction permit for the auxiliary boiler. Based on your initial application and subsequent additional information, the Department makes the following determinations and modifies these permits accordingly.

MODIFICATION OF PERMIT NO. PSD-FL-239 (UNIT 8)

Request No. 1: Revise the term "ambient temperature" to "compressor inlet temperature"; revise the temperature basis for the maximum heat input rates from 95° F to 59° F; revise the maximum heat input rate from gas firing to 1696 MMBtu/hour; and revise the maximum heat input rate from distillate oil firing to 1897 MMBtu/hour.

Determination: The request is approved subject to the following revisions of Permit No. PSD-FL-239.

Revise Condition No. A.2 from:

> "The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Purdom Unit 8 at ambient conditions of 95° F temperature, 60% relative humidity, and 14.7 psi pressure shall not exceed 1,467.7 mmBtu/hr when firing natural gas, or 1659.5 mmBtu/hr when firing No. 2 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. These curves or equations shall be used to establish the maximum allowable heat inputs at other ambient conditions for compliance determination."

To:

> "The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Purdom Unit 8 at compressor inlet conditions of 59° F temperature, 60% relative humidity, and 14.7 psi pressure shall not exceed 1696 MMBtu/hour when firing natural gas or 1897 MMBtu/hour when firing No. 2 fuel oil. These maximum heat input rates will vary depending upon compressor inlet conditions and the combustion

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turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other compressor inlet conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. These curves or equations shall be used to establish the maximum allowable heat inputs at other compressor inlet conditions for compliance determination."

Request No. 2: Authorize excess emissions due to major tuning of the dry low NOx (DLN) combustion system limited to no more than 72 hours per year.

Determination: The request is approved subject to the following revisions to Permit No. PSD-FL-239.

"Note a" under Condition B.1 is revised from:

"(a) 30-day rolling average excluding startup, shutdown, malfunction, and fuel switching."

To:

"(a) 30-day rolling average excluding authorized periods of startup, shutdown, malfunction, major DLN tuning sessions, and fuel switching."

Condition No. B.3 is revised from:

"Oxides of Nitrogen. Oxides of nitrogen emissions when firing natural gas shall not exceed 12 ppmvd at 15% O_2 on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction, or fuel switching) as measured by CEMS. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 30-day rolling average."

To:

"Oxides of Nitrogen. Oxides of nitrogen emissions when firing natural gas shall not exceed 12 ppmvd at 15% O_2 on a 30-day rolling average basis (except during authorized periods of startup, shutdown, malfunction, major DLN tuning sessions, or fuel switching) as measured by CEMS. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 30-day rolling average."

Condition No. B.4 is revised from:

"Oxides of Nitrogen. Oxides of nitrogen emissions when firing No. 2 fuel oil shall not exceed 42 ppmvd at 15% O_2 on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by CEMS, when fuel bound nitrogen (FBN) values are less than or equal to 0.015 percent. For fuel bound nitrogen values up to 0.03 percent, the allowance (and the adjusted standard) shall be determined, recorded, and maintained for each fuel delivery by the following formula:"

To:

"Oxides of Nitrogen. Oxides of nitrogen emissions when firing No. 2 fuel oil shall not exceed 42 ppmvd at 15% O_2 on a 30-day rolling average basis (except during authorized periods of startup, shutdown, malfunction or fuel switching), as measured by CEMS, when fuel bound nitrogen (FBN) values are less than or equal to 0.015 percent. For fuel bound nitrogen values up to 0.03 percent, the allowance (and the adjusted standard) shall be determined, recorded, and maintained for each fuel delivery by the following formula:"

Also, Condition No. C.1 is revised as indicated under Request No. 3.

Request No. 3: For the 30-day rolling compliance average, allow excess emissions for a total of 6 hours in a 24-hour period that includes a cold startup and for a total of 4 hours in any 24-hour period and that includes a hot startup.

Determination: The request is approved and the following conditions of Permit No. PSD-FL-239 are revised.

Condition No. C.1 revised from:

> "Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration."

To:

> "Excess emissions resulting from startup, shutdown, malfunction, or fuel switching shall be permitted providing best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed the following in any 24-hour period: a total of six hours during any day including a cold startup; a total of four hours during any day that includes a hot startup; and a total of two hours during days not including a hot or cold startup. A cold startup is startup after the combined cycle unit has been down for more than 48 hours. A hot startup is startup after the combined cycle unit has been down for 48 hours or less. A documented malfunction is a malfunction that is documented within one working day of detection by contacting the Department's Northwest District Office by telephone, facsimile transmittal, or electronic mail.
>
> In addition to the above, excess emissions resulting from a major DLN tuning session shall be permitted provided the tuning session is performed in accordance with the manufacturer's specifications and in no case shall exceed 72 hours in any calendar year. A "major tuning session" would occur after a combustor change-out, a major repair to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.
>
> All quality-assured hourly NOx emissions data shall be used when demonstrating compliance with the emissions cap. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).
>
> [Rule 62-210.700(5), F.A.C.]"

Paragraph 6 in Condition D.1 revised from:

> Determination of Oxides of Nitrogen emissions will be by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 may be used. Compliance with the NO_X emissions standards in Table 1 shall be demonstrated with this CEMS system based on a 30 day rolling average. Based on CEMS data at the end of each operating day, a new 30 day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days. Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200 where emissions exceed the NO_X standard in Table 1. These excess emission periods shall be reported as required in Section C. 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.

To:

> Determination of Oxides of Nitrogen emissions will be by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 may be used. Compliance with the NO_X emissions standards in Table 1 shall be demonstrated with CEMS data based on a 30-day rolling average. Based on CEMS data at the end of each operating day, a new 30-day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days. In accordance with Condition C.1, hourly emission rates shall not include periods of

startup, shutdown, documented malfunction, fuel switching, or major tuning sessions where emissions exceed the NO_X standard in Table 1. These excess emission periods shall be reported as required in Section C. 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.

New Condition No. C.4 is added.

"Quarterly NOx Monitoring Report. Within 30 days following each calendar quarter, the permittee shall submit a report to the Department's Northwest District Office that summarizes the following information for the quarter.

a. Identify the hours of NOx emission data excluded from the compliance determination due to each of the following: startups, shutdowns, documented malfunctions, major tuning sessions, and fuel switches.

b. For each malfunction, identify the: date; approximate time range; duration (hours) of the malfunction; NOx emission levels during the malfunction; problem and cause of the problem (if known); and corrective action taken (if any).

c. Identify the hours of NOx monitoring system down time due to each of the following: monitor malfunctions; non-monitor malfunctions; quality assurance calibrations; other known causes; and unknown causes. Identify the monitor availability.

d. Monitor availability shall not be less than 95% in any calendar quarter. In the event that 95% availability is not achieved, the permittee shall include a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

[Rules 62-4.070(3), 62-4.130, 62-4.160(14)(b), 62-210.700(6), and Rule 62-212.400(BACT), F.A.C.]"

Revise Condition No. F.1 from:

"The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from Unit 8. Thirty day rolling average periods when NO_X emissions (ppmvd @ 15% oxygen) are above the BACT standards (12/42 ppmvd for gas/oil) shall be reported to the DEP Northwest District Office pursuant to Rule 62-4.160(8), F.A.C. The continuous emission monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards in Table 1 following the format of 40 CFR 60.7 (1997 version). The NO_x CEMS shall be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring required for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1997 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon request from DEP, the CEMS emission rates for NO_X on Unit 8 shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332."

To:

"The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from Unit 8. Thirty day rolling average periods when NO_X emissions (ppmvd @ 15% oxygen) are above the BACT standards (12/42 ppmvd for gas/oil) shall be reported to the DEP Northwest District Office pursuant to Rule 62-4.160(8), F.A.C. The continuous emission monitoring systems must comply with the certification and quality assurance, and other

applicable requirements from 40 CFR 75. In accordance with Condition C.1, periods of startup, shutdown, malfunction, fuel switching, and major DLN tuning sessions shall be monitored, recorded, and reported as excess emissions when emission levels exceed the BACT standards in Table 1. With respect to NSPS Subpart GG, excess emissions shall be reported in accordance with 40 CFR 60.7 (2001 version). The NO_x CEMS shall be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring required for reporting excess emissions in accordance with 40 CFR 60.334(c)(1) (2001 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (2001 version) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon a request from the Department, the CEMS emission rates for NO_X on Unit 8 shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332."

Revise Condition G.5 from:

"Quarterly excess emission reports, in accordance with 40 CFR 60.7 (7) (c) (1997 version), shall be submitted to the DEP's Northwest District office."

To:

"In accordance with 40 CFR 60.7(7) (2001 version), semiannual excess emission reports shall be submitted to the Department's Northwest District Office. Each report is due no later than 30 days following the reporting period (January through June and July through December). The report shall summarize any emissions in excess of the NSPS Subpart GG standards and monitor downtime."

MODIFICATION OF PERMIT NO. 1290001-002-AC (AUXILIARY BOILER)

Request No. 4: Revise original air construction permit to allow operation of the auxiliary steam boiler when either Unit 7 or Unit 8 is not operating.

Determination: The request is approved and Condition No. 6 of Permit No. 1290001-002-AC is revised as follows.

From:

"This emissions unit shall only be operated as an auxiliary source of steam when the existing steam generating units (boilers 5, 6, & 7) are not operating. (Construction permit application)"

To:

"This emissions unit shall only be operated as an auxiliary source of steam when either Unit 7 or Unit 8 is not operating. {Permitting Note: Units 5 and 6 are permanently shut down.} (Construction permit application)"

Details of the Department's review are available in the Technical Evaluation and Preliminary Determination that accompanied the Draft Permit modification package. This permit modification is issued pursuant to Chapter 403 of the Florida Statutes. Attached are copies of original air permit Nos. PSD-FL-239 and 1290001-002-AC. A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Sincerely,

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the persons listed:

Mr. Robert E. McGarrah, City of Tallahassee *
Ms. Jennette Curtis, City of Tallahassee
Mr. Karl Bauer, P.E., City of Tallahassee
Ms. Sandra Veazey, NWD
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

_____ _____
(Clerk) Date)