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BUREAU OF AIR REGULATION

June 30, 2008

Ms. Trina Vielhauer
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

**Re: Gainesville Regional Utilities
J.R. Kelly Generating Station
Title V Air Operation Permit Renewal Application
Permit No. 0010005-005-AV**

Dear Ms. Vielhauer:

Project No. : 0010005-008-AV

On behalf of the City of Gainesville, Gainesville Regional Utilities (GRU), two copies of an application package to renew the GRU J.R. Kelly Generating Station Title V Air Operation Permit No. 0010005-005-AV are enclosed for Department review. Pursuant to the requirements of the requirements of Chapter 62-213.400, F.A.C., the application package contains the Department's *Application for Air Permit - Long Form* and all required supplemental facility and emission unit information.

Please contact Regina Embry at (352) 393-1299 or email at embryrg@gru.com if there are any questions regarding this application.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Thomas W. Davis, P.E.
Vice President

cc: Mr. Greg Strong
FDEP Northeast District

Enclosure

3701 Northwest
98th Street
Gainesville, FL
32606

(352)
332-0444

FAX(352)
332-6722

J.R. KELLY GENERATING STATION

**TITLE V OPERATION PERMIT
RENEWAL APPLICATION**

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BUREAU OF AIR REGULATION

Prepared for:



Gainesville, Florida

Prepared by:



Environmental Consulting & Technology, Inc.

3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 080178-0100

June 2008

INTRODUCTION

The City of Gainesville, Gainesville Regional Utilities (GRU) J.R. Kelly Generating Station located in Gainesville, Alachua County, Florida, is a nominal 192-megawatt (MW) electric generation facility. The J.R. Kelly Generating Station consists of one steam boiler/steam turbine generator (STG) unit (Unit No. 7), three simple-cycle combustion turbines (Units CT-1, CT-2, and CT-3), one combined/simple-cycle combustion turbine unit (Unit CC-1), a recirculating cooling water system, fuel oil storage tanks, water treatment facilities, and ancillary support equipment. CC-1 is comprised of one combustion turbine generator (CTG) and one unfired heat recovery steam generator (HRSG). CC-1 HRSG is equipped with a bypass stack to allow for the option of simple-cycle operation. Steam produced by CC-1 HRSG is used by existing Unit No. 8 STG to generate additional electricity. Existing steam boilers Unit No. 6 and Unit No. 8 have permanently ceased operation.

Additional facilities owned by GRU are located adjacent to the J.R. Kelly Generating Station. These facilities include vehicle fleet maintenance (vehicle servicing, cleaning, and refueling), GRU administration building, area used by the water/wastewater department for storage of equipment and bulk materials, administrative offices for meter readers, water department distribution operations (administration offices, construction equipment yard, and vehicle parking), carpenter shop, two warehouses for equipment and materials storage, transformer shop (electrical equipment storage, testing, maintenance, dielectric fluid storage tanks, and a paint spray booth), and a building for storage of equipment that may contain polychlorinated biphenyls (PCBs).

Operation of the J.R. Kelly Generating Station is currently authorized by Florida Department of Environmental Protection (FDEP) Final Title V Air Operation Permit No. 0010005-005-AV. Final Title V Air Operation Permit No. 0010005-005-AV was issued with an initial effective date of January 1, 2004, and an expiration date of December 31, 2008.

FDEP's Title V regulations are codified in Chapter 62-213, Florida Administrative Code (F.A.C.), Operation Permits for Major Sources of Air Pollution. With respect to Title V air operation permit renewal deadlines, Rule 62-213.420(1)(a)2., F.A.C., requires the permittee to apply for a permit renewal at least 180 days prior to permit expiration for permits that expire prior to June 1, 2009. For the J.R. Kelly Generating Station, this regulatory deadline results in the submittal of a Title V air operation permit renewal application no later than July 5, 2008.

This application package, consisting of FDEP's Application for Air Permit – Long Form, Effective March 16, 2008, and all required supplemental facility and emission unit information, constitutes GRU's Title V permit renewal application for the J.R. Kelly Generating Station and is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C.

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

- A: Facility Location Map.
- B-1, B-2: Facility Plot Plans.
- C-1, C-2: Process Flow Diagrams.
- D: Precautions to Prevent Emissions of Unconfined Particulate Matter.
- E: List of Insignificant Activities.
- F: Identification of Applicable Requirements.
- G: Compliance Report.
- H: List of Equipment/Activities Regulated under Title VI .
- I: Acid Rain Part.
- J: Fuel Specifications.
- K: Procedures for Startup.
- L: Alternate Methods of Operation.

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

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

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: City of Gainesville Gainesville Regional Utilities (GRU)	
2. Site Name: J.R. Kelly Generating Station	
3. Facility Identification Number: 0010005	
4. Facility Location: Street Address or Other Locator: 605 Southeast 3rd Street City: Gainesville County: Alachua Zip Code: 32601-7060	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Regina Embry, Electric Utility Engineer	
2. Application Contact Mailing Address: Organization/Firm: City of Gainesville, Gainesville Regional Utilities (GRU) Street Address: P.O. Box 147117 (A136) City: Gainesville State: Florida Zip Code: 32614-7117	
3. Application Contact Telephone Numbers... Telephone: (352) 393 - 1299 ext. Fax: (352) 334 - 3151	
4. Application Contact E-mail Address: embryrg@gru.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 7/1/08	3. PSD Number (if applicable):
2. Project Number(s): 0010005-008-AV	4. Siting Number (if applicable):

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APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

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

Air Operation Permit

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

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

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

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

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

Application Comment

GRU has been issued a Final Title V Operation Permit from the FDEP authorizing operation of the J.R. Kelly Generating Station. Final Title V Operation Permit Revision No. 0010005-005-AV was issued with an effective date of January 1, 2004, and an expiration date of December 31, 2008.

In accordance with Rule 62-213.420(1)(a)2., F.A.C., an application for a Title V permit renewal must be submitted at least 180 days prior to permit expiration for permits that expire prior to June 1, 2009. For the J.R. Kelly Generating Station, this regulatory deadline results in the submittal of a Title V permit renewal application no later than July 5, 2008. This application and supporting documents constitutes GRU's request for renewal of Final Title V Operation Permit Revision No. 0010005-005-AV per Rule 62-4.090, F.A.C.

APPLICATION INFORMATION

Owner/Authorized Representative Statement

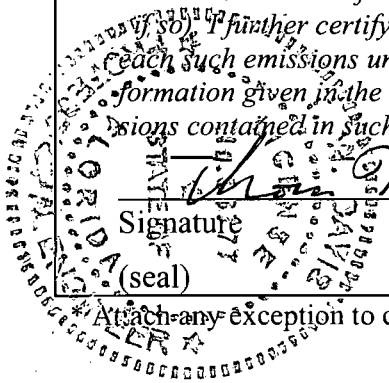
Not applicable.

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

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

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Thomas W. Davis Registration Number: 36777
2. Professional Engineer Mailing Address: Organization/Firm: Environmental Consulting & Technology, Inc. Street Address: 3701 Northwest 98th Street City: Gainesville State: Florida Zip Code: 32606
3. Professional Engineer Telephone Numbers... Telephone: (352) 332 - 0444 ext. Fax: (352) 332 - 6722
4. Professional Engineer E-mail Address: tdavis@ectinc.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature: <u><i>Thomas W. Davis</i></u> Date: <u>6/30/08</u>

Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone 17 East (km) 372.07 (NAC 83) North (km) 3,280.28		2. Facility Latitude/Longitude: Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
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 :			

Facility Contact

1. Facility Contact Name: Regina Embry, Electric Utility Engineer
2. Facility Contact Mailing Address: Organization/Firm: City of Gainesville, Gainesville Regional Utilities (GRU) Street Address: P.O. Box147117 (A136) City: Gainesville State: Florida Zip Code: 32614-7117
3. Facility Contact Telephone Numbers: Telephone: (352) 393 - 1299 ext. Fax: (352) 334 - 3151
4. Facility Contact E-mail Address: embryrg@gru.com

Facility Primary Responsible Official

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

1. Facility Primary Responsible Official Name: John W. Stanton
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: City of Gainesville, Gainesville Regional Utilities (GRU) Street Address: P.O. Box 147117 (A132) City: Gainesville State: Florida Zip Code: 32614-7117
3. Facility Primary Responsible Official Telephone Numbers... Telephone: (315) 393-1789 ext. Fax: (352) 334-2786
4. Facility Primary Responsible Official E-mail Address: swansongp@gru.com

FACILITY INFORMATION

Facility Regulatory Classifications

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

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment: <p style="text-align: center;">The combined-cycle unit (CC1, EU 010) is subject to NSPS Subpart GG.</p>	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NO _x	A	N
SO ₂	A	N
PM ₁₀	A	N
PM	A	N
CO	A	N
VOC	B	N

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

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

Additional Requirements for Air Construction Permit Applications **Not applicable.**

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

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

Not applicable.

- | |
|---|
| 1. List of Exempt Emissions Units:
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
|---|

Additional Requirements for Title V Air Operation Permit Applications

- | |
|---|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)
<input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment E</u> <input type="checkbox"/> Not Applicable (revision application) |
|---|

- | |
|---|
| 2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
<input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment F</u>
<input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements) |
|---|

- | |
|--|
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
<input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment G</u>
Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
|--|

- | |
|--|
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
<input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment H</u>
<input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed
<input type="checkbox"/> Not Applicable |
|--|

- | |
|--|
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
|--|

- | |
|---|
| 6. Requested Changes to Current Title V Air Operation Permit:
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
|---|

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

Attached, Document ID: **Attachment I** Previously Submitted, Date: _____

Not Applicable (not an Acid Rain source)

Phase II NO_x Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

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

Not Applicable

New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):

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

Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

Attached, Document ID: _____ Previously Submitted, Date: **May 1, 2008**

Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):

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

Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

E.U. 007

EMISSIONS UNIT INFORMATION

Section [1] of [3]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:

Fossil fuel-fired steam generator unit No. 7

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

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

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

Acid Rain Unit

CAIR Unit

Hg Budget Unit

9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **25 MW**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [1] of [3]

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: <p style="text-align: center;">None</p>
2. Control Device or Method Code: N/A

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [1] of [3]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: JRK-7		2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: 200 feet		7. Exit Diameter: 10.5 feet
8. Exit Temperature: 344°F	9. Actual Volumetric Flow Rate: 114,707 acfm		10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Exit temperature (Field 8) and actual flow rate (Field No. 9) taken from September/October 2002 stack test report.			

EMISSIONS UNIT INFORMATION

Section [1] of [3]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): Residual fuel oils burned in Unit No. 7		
2. Source Classification Code (SCC): 1-01-004-01		3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 1.660	5. Maximum Annual Rate: 14,541.6	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit: 150
10. Segment Comment: Maximum hourly and annual fee rates based on 249 MMBtu/hr heat input and a nominal residual fuel oil heat content of 150,000 Btu/gal. Up to 1.5 million gallons of on-specification used oil may also be combusted during any consecutive 12-month period.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): Pipeline-quality natural gas burned in Unit No. 7		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 0.262	5. Maximum Annual Rate: 2,291.1	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 1,040
10. Segment Comment: Maximum hourly and annual fuel rates based on 272 MMBtu/hr heat input and a nominal residual fuel oil heat content of 1,040 Btu/ft³.		

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 81.6 lb/hr		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tpy N/A			
6. Emission Factor: 0.1 and 0.3 lb/MMBtu Reference: Conditions A.7 and A.8 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tpy		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tpy		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly emission rate based on 0.3 lb/10⁶ Btu during soot blowing. Hourly PM = (0.3 lb/MMBtu) × (272.0 MMBtu/hr) = 81.6 lb/hr Annual emission rate based on 0.3 lb/10⁶ Btu during soot blowing (for 3 hr/day) and 0.1 lb/10⁶ Btu (for 21 hr/day) during non-soot blowing. Annual PM = (0.125 lb/MMBtu) × (272.0 MMBtu/hr) × (8,760 hr/yr) × (1 ton/2,000 lb) Annual PM = 148.9 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/10⁶ Btu	4. Equivalent Allowable Emissions: 27.2 lb/hr 148.9 tpy
5. Method of Compliance: EPA Reference Methods 5, 5B, 5F, or 17	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emission rates applicable for natural gas firing. Annual allowable emission rate based on 0.3 lb/10⁶ Btu during soot blowing (for 3hr/day) and 0.1 lb/10⁶ Btu (for 21 hr/day) during non-soot blowing. Rule 62-296.405(1)(b), F.A.C.	

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/10⁶ Btu	4. Equivalent Allowable Emissions: 81.6 lb/hr 148.9 tpy
5. Method of Compliance: EPA Reference Methods 5, 5B, 5F, or 17	
6. Allowable Emissions Comment (Description of Operating Method): Limit applicable natural gas firing during soot blowing and load change. Annual allowable emission rate based on 0.3 lb/10⁶ Btu during soot blowing (for 3hr/day) and 0.1 lb/10⁶ Btu (for 21 hr/day) during non-soot blowing. Rule 62-210.700(3), F.A.C.	

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

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

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/10⁶ Btu	4. Equivalent Allowable Emissions: 24.9 lb/hr 136.3 tpy
5. Method of Compliance: EPA Reference Methods 5, 5B, 5F, or 17	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emission rates applicable for natural gas-firing. Annual allowable emission rate based on 0.3 lb/10⁶ Btu during soot blowing (for 3hr/day) and 0.1 lb/10⁶ Btu (for 21 hr/day) during non-soot blowing. Rule 62-296.405(1)(b), F.A.C.	

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/10⁶ Btu	4. Equivalent Allowable Emissions: 74.7 lb/hr 136.3 tpy
5. Method of Compliance: EPA Reference Methods 5, 5B, 5F, or 17	
6. Allowable Emissions Comment (Description of Operating Method): Limit applicable natural gas-firing during soot blowing and load change. Annual allowable emission rate based on 0.3 lb/10⁶ Btu during soot blowing (for 3hr/day) and 0.1 lb/10⁶ Btu (for 21 hr/day) during non-soot blowing. Rule 62-210.700(3), F.A.C.	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 684.8 lb/hr		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tpy			
6. Emission Factor: 2.75 lb/10⁶ Btu Reference: Condition A.9 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tpy		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tpy		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly SO₂ = (2.75lb/MMBtu) × (249.0 MMBtu/hr) = 684.8 lb/hr Annual SO₂ = (2.75lb/MMBtu) × (249.0 MMBtu/hr) × (8,760 hr/yr) × (1 ton/2,000lb) Annual SO₂ = 2,999.2 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.75 lb/10⁶ Btu	4. Equivalent Allowable Emissions: 648.8 lb/hr 2,992.2 tpy
5. Method of Compliance: Fuel oil sulfur analyses using ASTM D2622-92, ASTM D4294-90, ASTM D1552-90, ASTM D129-91, or latest editions of these ASTM methods.	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emission rates applicable for residual fuel oil-firing Rule 62-296.405(1)(c)1.j., F.A.C.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.5 weight percent sulfur fuel oil	4. Equivalent Allowable Emissions: 648.8 lb/hr 2,992.2 tpy
5. Method of Compliance: Fuel oil sulfur analyses using ASTM D2622-92, ASTM D4294-90, ASTM D1552-90, ASTM D129-91, or latest editions of these ASTM methods.	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emission rates applicable for residual fuel oil-firing Rule 62-296.405(1)(e)3., F.A.C., and 10-30-97 applicant request.	

EMISSIONS UNIT INFORMATION

Section [1] of [3]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 4

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: Rule 62-296.405(1)(e)1., F.A.C. Annual testing is not required if fuel oil is not burned, other than during startup, for more than 400 hours per federal fiscal year.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 4

1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: 60 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: Maximum period of excess opacity allowed for 3 hours in any 24-hour period during soot blowing and load changes. Rule 62-210.700(3), F.A.C.	

EMISSIONS UNIT INFORMATION

Section [1] of [3]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 3 of 4

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: * % Maximum Period of Excess Opacity Allowed: * min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: *Best operational practices to minimize emissions and duration. Excess emissions resulting from startups and shutdown. Rule 62-210.700(2), F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation 4 of 4

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: * % Maximum Period of Excess Opacity Allowed: * min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: *Best operational practices to minimize emissions and duration. Excess opacity allowed for startups, shutdowns, and malfunctions. Maximum period of excess emissions allowed is 2 hr in any 24-hour period unless authorized by FDEP for a longer duration. Rule 62-210.700(1), F.A.C.	

EMISSIONS UNIT INFORMATION

Section [1] of [3]

H. CONTINUOUS MONITOR INFORMATION – NOT APPLICABLE

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [1] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

<p>1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input checked="" type="checkbox"/> Attached, Document ID: Attachment C-1 <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input checked="" type="checkbox"/> Attached, Document ID: Attachment J <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input checked="" type="checkbox"/> Attached, Document ID: Attachment K <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p>Test Date(s)/Pollutant(s) Tested: _____</p> <p><input type="checkbox"/> Previously Submitted, Date: _____</p> <p>Test Date(s)/Pollutant(s) Tested: _____</p> <p><input type="checkbox"/> To be Submitted, Date (if known): _____</p> <p>Test Date(s)/Pollutant(s) Tested: _____</p> <p><input checked="" type="checkbox"/> Not Applicable (per Condition A.17 of Final Permit No. 0010005-005-AV)</p> <p>Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.</p>
<p>7. Other Information Required by Rule or Statute:</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

EMISSIONS UNIT INFORMATION

Section [1] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications **Not applicable**

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: <input checked="" type="checkbox"/> Attached, Document ID: Attachment F
2. Compliance Assurance Monitoring: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation: <input checked="" type="checkbox"/> Attached, Document ID: Attachment L <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Additional Requirements Comment

E.U. 009

EMISSIONS UNIT INFORMATION

Section [2] of [3]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:

Simple-cycle combustion turbines CT-1, CT-2, and CT-3

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

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

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

Acid Rain Unit

CAIR Unit

Hg Budget Unit

9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **16.3 MW (per CT)**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [2] of [3]

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: None
2. Control Device or Method Code: N/A

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [2] of [3]

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)**Emission Point Description and Type****Not applicable.**

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

EMISSIONS UNIT INFORMATION

Section [2] of [3]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): Pipeline-quality natural gas burned in CT-1, CT-2, or CT-3 (per CT)		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 0.192	5. Maximum Annual Rate: 1,684.6	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 1,040
10. Segment Comment: Maximum hourly and annual fuel rates based on base load conditions at 80°F, 14.7 psia, 200 MMBtu/hr heat input, and nominal fuel heating value of 1,040 Btu/ft³.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): Distillate fuel oil burned in CT-1, CT-2, or CT-3 (per CT)		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 1.511	5. Maximum Annual Rate: 13,235.9	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit: 137,000
10. Segment Comment: Maximum hourly and annual fuel rates based on base load conditions at 80°F, 14.7 psia, 207 MMBtu/hr heat input, and nominal fuel heating value of 137,000 Btu/gal.		

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Not applicable.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hr	4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tpy	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tpy	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tpy	9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

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

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

Not applicable.

Allowable Emissions Allowable Emissions __ of __

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

Allowable Emissions Allowable Emissions 2 of 4

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

EMISSIONS UNIT INFORMATION

Section [2] of [3]

H. CONTINUOUS MONITOR INFORMATION – NOT APPLICABLE

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

Continuous Monitoring System: Continuous Monitor ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [2] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

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

EMISSIONS UNIT INFORMATION

Section [2] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

Not applicable

- | |
|---|
| 1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
| 3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
<input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |

Additional Requirements for Title V Air Operation Permit Applications

- | |
|--|
| 1. Identification of Applicable Requirements:
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 2. Compliance Assurance Monitoring:
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 3. Alternative Methods of Operation:
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |
| 4. Alternative Modes of Operation (Emissions Trading):
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable |

Additional Requirements Comment

E.U. 010

EMISSIONS UNIT INFORMATION

Section [3] of [3]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
 - The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
 - This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
 - This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Emission unit consists of one General Electric (GE) 7121 7EA combustion turbine generator (CTG). The CTG may operate in simple-cycle or combined-cycle modes of operation. The CTG will be fired with pipeline-quality natural gas or low-sulfur distillate fuel oil.

3. Emissions Unit Identification Number: **010 (CC-1)**

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

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

- Acid Rain Unit
- CAIR Unit
- Hg Budget Unit

9. Package Unit:

Manufacturer: **General Electric**

Model Number: **PG7121 (7EA)**

10. Generator Nameplate Rating: **96.1 MW**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [3] of [3]

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: Not applicable. Unit is equipped with pollution prevention equipment (i.e., dry low-NO_x combustors [during natural gas-firing] and water injection [during distillate fuel oil-firing]) to reduce NO_x formation.
2. Control Device or Method Code: N/A

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

Emissions Unit Control Equipment/Method: Control ___ of ___

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

EMISSIONS UNIT INFORMATION

Section [3] of [3]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: CC-1, Bypass CC-1		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: CC-1: Combined-cycle mode, HRSG outlet stack. Bypass CC-1: Simple-cycle mode, HRSG bypass stack.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: CC-1: 102 feet Bypass CC-1: 88 feet	7. Exit Diameter: CC-1: 15.5 feet Bypass CC-1: 15.5 feet	
8. Exit Temperature: 242°F	9. Actual Volumetric Flow Rate: 704,482 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Stack temperature and flow rate are for combined-cycle, 100-percent load, 59°F, and natural gas-firing operating conditions. Stack temperature and flow rate will vary with operating mode, load, fuel type, and ambient temperature. See Tables 2-8 through 2-11 of the PSD permit application, dated August 1999.			

EMISSIONS UNIT INFORMATION

Section [3] of [3]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): Pipeline-quality natural gas burned in CC-1 combustion turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 1.041	5. Maximum Annual Rate: 9,122.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 1,040
10. Segment Comment: Maximum hourly and annual fuel rates based on 1,083.0 MMBtu/hr heat input and a nominal natural gas heat content of 1,040 Btu/ft³.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): Distillate fuel oil burned in CC-1 combustion turbine		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 8.179	5. Maximum Annual Rate: 8,178.8	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash: 0.01	9. Million Btu per SCC Unit: 137
10. Segment Comment: Maximum hourly and annual fuel rates based on 1,120.5 MMBtu/hr heat input and a nominal distillate fuel oil heat content of 137,000 Btu/ft³.		

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 166 lb/hr		133.0 tpy	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tpy			
6. Emission Factor: 166 lb/hr Reference: Condition B.12 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tpy		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tpy		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly emission rate based on permit allowable rate for oil firing. Annual emission rate based on permit cap for CC-1.			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: ESCPD	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 9 ppmvd @ 15% oxygen, 720 block hour average	4. Equivalent Allowable Emissions: 32 lb/hr 133 tpy
5. Method of Compliance: NO_x CEMS	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Unit is also subject to less stringent NO_x limits of 40 CFR 60, Subpart GG (NSPS). Limit applicable for natural gas firing.	

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: ESCPD	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 32 lb/hr	4. Equivalent Allowable Emissions: 32 lb/hr 133 tpy
5. Method of Compliance: EPA Reference Method 20 (initial test only)	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Limit applicable for natural gas firing.	

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

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

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: ESCPSD	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 42 ppmvd @ 15% oxygen, 720 block hour average	4. Equivalent Allowable Emissions: 166 lb/hr 133 tpy
5. Method of Compliance: NO_x CEMS	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Unit is also subject to less stringent NO_x limits of 40 CFR 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil firing.	

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: ESCPSD	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 166 lb/hr	4. Equivalent Allowable Emissions: 166 lb/hr 133 tpy
5. Method of Compliance: EPA Reference Method 20 (initial test only)	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Limit applicable for distillate fuel oil firing.	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 43 lb/hr		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tpy			
6. Emission Factor: 43 lb/hr Reference: Condition B.13 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tpy		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tpy		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly emission rate based on permit allowable rate. Annual emission rate based on continuous operation: Annual CO = (43lb/hr) × (8,760 hr/yr) × (1 ton/2,000 lb) = 188.3 tpy.			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 20 ppmvd @ 15% oxygen	4. Equivalent Allowable Emissions: 43 lb/hr 188.3 tpy
5. Method of Compliance: EPA Reference Method 10 (annual gas firing only) or submittal of periodic tuning data.	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-212.400, F.A.C. Limit applicable for both natural gas firing and distillate fuel oil firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 43 lb/hr	4. Equivalent Allowable Emissions: 43 lb/hr 188.3 tpy
5. Method of Compliance: EPA Reference Method 10 (annual gas firing only) or submittal of periodic tuning data.	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-212.400, F.A.C. Limit applicable for both natural gas firing and distillate fuel oil firing.	

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM/PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 10 lb/hr		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tpy			
6. Emission Factor: 10 lb/hr Reference: Condition B.16 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tpy		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tpy		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly emission rate based on permit allowable rate for distillate fuel oil firing. Annual emission rate based on permit limits and on 7,760 hr/yr natural gas firing and 1,000 hr/yr distillate fuel oil firing. Annual PM/PM₁₀ = (5 lb/hr × 7,760 hr/yr) + [10 lb/yr × 1,000 hr/yr] × (1 ton/2,000 lb) Annual PM/PM₁₀ = 24.4 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 10-percent opacity	4. Equivalent Allowable Emissions: 5 lb/hr 24.4 tpy
5. Method of Compliance: EPA Reference Method 9 (surrogate for PM/PM₁₀)	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-212.400, F.A.C. Limit applicable for natural gas firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 10-percent opacity	4. Equivalent Allowable Emissions: 10 lb/hr 24.4 tpy
5. Method of Compliance: EPA Reference Method 9 (surrogate for PM/PM₁₀) Annual test only for fuel oil and only if fuel oil is combusted for more than 400 hours during a 12-month period.	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-212.400, F.A.C. Limit applicable for distillate fuel oil firing.	

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 4.5 lb/hr		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tpy			
6. Emission Factor: 4.5 lb/hr Reference: Condition B.14 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tpy		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tpy		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly emission rate based on permit allowable rate for oil firing. Annual emission rate based on permit limits and on 7,760 hr/yr natural gas firing and 1,000 hr/yr distillate fuel oil firing. Annual PM/PM₁₀ = ([1.8 lb/hr × 7,760 hr/yr] + [4.5 lb/yr × 1,000 hr/yr]) × (1 ton/2,000 lb) Annual PM/PM₁₀ = 9.2 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.4 ppmw	4. Equivalent Allowable Emissions: 1.8 lb/hr 9.2 tpy
5. Method of Compliance: EPA Reference Methods 18, 25, or 25A (initial test only)	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Limit applicable for natural gas firing.	

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.8 lb/hr	4. Equivalent Allowable Emissions: 1.8 lb/hr 9.2 tpy
5. Method of Compliance: EPA Reference Methods 18, 25, or 25A (initial test only)	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Limit applicable for natural gas firing.	

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

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

Allowable Emissions Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3.5 ppmvw	4. Equivalent Allowable Emissions: 4.5 lb/hr 9.2 tpy
5. Method of Compliance: EPA Reference Methods 18, 25, or 25A (initial test only)	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Limit applicable for distillate fuel oil firing.	

Allowable Emissions Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 4.5 lb/hr	4. Equivalent Allowable Emissions: 4.5 lb/hr 9.2 tpy
5. Method of Compliance: EPA Reference Methods 18, 25, or 25A (initial test only)	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-4.070(3), F.A.C. Limit applicable for distillate fuel oil firing.	

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

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 57.4 lb/hr		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tpy			
6. Emission Factor: 0.05 weight % sulfur fuel oil Reference: Condition E.15 of FINAL Permit Revision No. 0010005-005-AV		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): N/A tpy		8.b. Baseline 24-month Period: N/A From: To:	
9.a. Projected Actual Emissions (if required): N/A tpy		9.b. Projected Monitoring Period: N/A <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly emission rate based on permit allowable sulfur content on distillate fuel oil. Hourly SO₂ = (0.05 lb S/100 lb oil) × (57,400 lb oil/hr) × (2 lb SO₂/lb S) = 57.4 lb/hr SO₂ Annual emissions based on 1.6 lb/hr (100 percent load, 59°F, natural gas-firing case) for 7,760 hr/yr and 57.4 lb/hr (100 percent, 59°F, distillate fuel oil-firing case) for 1,000 hr/yr. Annual SO₂ = [(1.6 lb/hr × 7,760 hr/yr) + (57.4 lb/hr × 1,000 hr/yr)] × (1 ton/ 2,000 lb) Annual SO₂ = 35.0 tpy			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <20 grains S/100 scf natural gas	4. Equivalent Allowable Emissions: 1.6 lb/hr 35.0 tpy
5. Method of Compliance: 40 CFR 75, Appendix D procedures	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-204.800(7), F.A.C. Unit is also subject to less stringent SO₂ limits of 40 CFR 60, Subpart GG (NSPS). Limit applicable for natural gas firing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05 weight % S	4. Equivalent Allowable Emissions: 57.4 lb/hr 35.0 tpy
5. Method of Compliance: Fuel analysis for sulfur content	
6. Allowable Emissions Comment (Description of Operating Method): FDEP Rule 62-204.800(7), F.A.C. Unit is also subject to less stringent SO₂ limits of 40 CFR 60, Subpart GG (NSPS). Limit applicable for distillate fuel oil firing.	

EMISSIONS UNIT INFORMATION

Section [3] of [3]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: Rule 62-212.400, F.A.C. Annual test only for fuel oil and only if fuel oil is combusted for more than 400 hours during a 12-month period.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: *	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: * % Maximum Period of Excess Opacity Allowed: * min/hour	
4. Method of Compliance: EPA Reference Method 9	
5. Visible Emissions Comment: *Best operational practices to minimize emissions and duration. Excess opacity allowed for startups, shutdowns, malfunctions, and fuel switching. Maximum period of excess emissions allowed is 2 hours in any 24-hour period. Rule 62-210.700(1), F.A.C.	

EMISSIONS UNIT INFORMATION

Section [3] of [3]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: EM	2. Pollutant(s): NO_x
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: TECO Model Number: 42C Serial Number: 42C-65766-350	
5. Installation Date: October 3, 2000	6. Performance Specification Test Date: May 24, 2001
7. Continuous Monitor Comment: Required by 40 CFR 75 (Acid Rain Program). Data shown is applicable to the main (HRSG) stack CEMS.	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: CO2	2. Pollutant(s): Carbon dioxide
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Siemens Model Number: 6E Serial Number: N1-M8-0535	
5. Installation Date: October 3, 2000	6. Performance Specification Test Date: May 24, 2001
7. Continuous Monitor Comment: Required by 40 CFR 75 (Acid Rain Program). Data shown is applicable to the main (HRSG) stack CEMS.	

EMISSIONS UNIT INFORMATION

Section [3] of [3]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: EM	2. Pollutant(s): NO_x
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: TECO Model Number: 42D Serial Number: 42D-45580-274	
5. Installation Date: October 3, 2000	6. Performance Specification Test Date: May 24, 2001
7. Continuous Monitor Comment: Required by 40 CFR 75 (Acid Rain Program). Data shown is applicable to the HRSG bypass stack CEMS.	

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: CO2	2. Pollutant(s): Carbon dioxide
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Siemens Model Number: 6E Serial Number: N1-M0-0591	
5. Installation Date: October 3, 2000	6. Performance Specification Test Date: May 24, 2001
7. Continuous Monitor Comment: Required by 40 CFR 75 (Acid Rain Program). Data shown is applicable to the HRSG bypass stack CEMS.	

EMISSIONS UNIT INFORMATION

Section [3] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attachment C-2 <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attachment J <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Attachment K <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: 09/27/07 Test Date(s)/Pollutant(s) Tested: 08/15/07; CO <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [3] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications **Not applicable.**

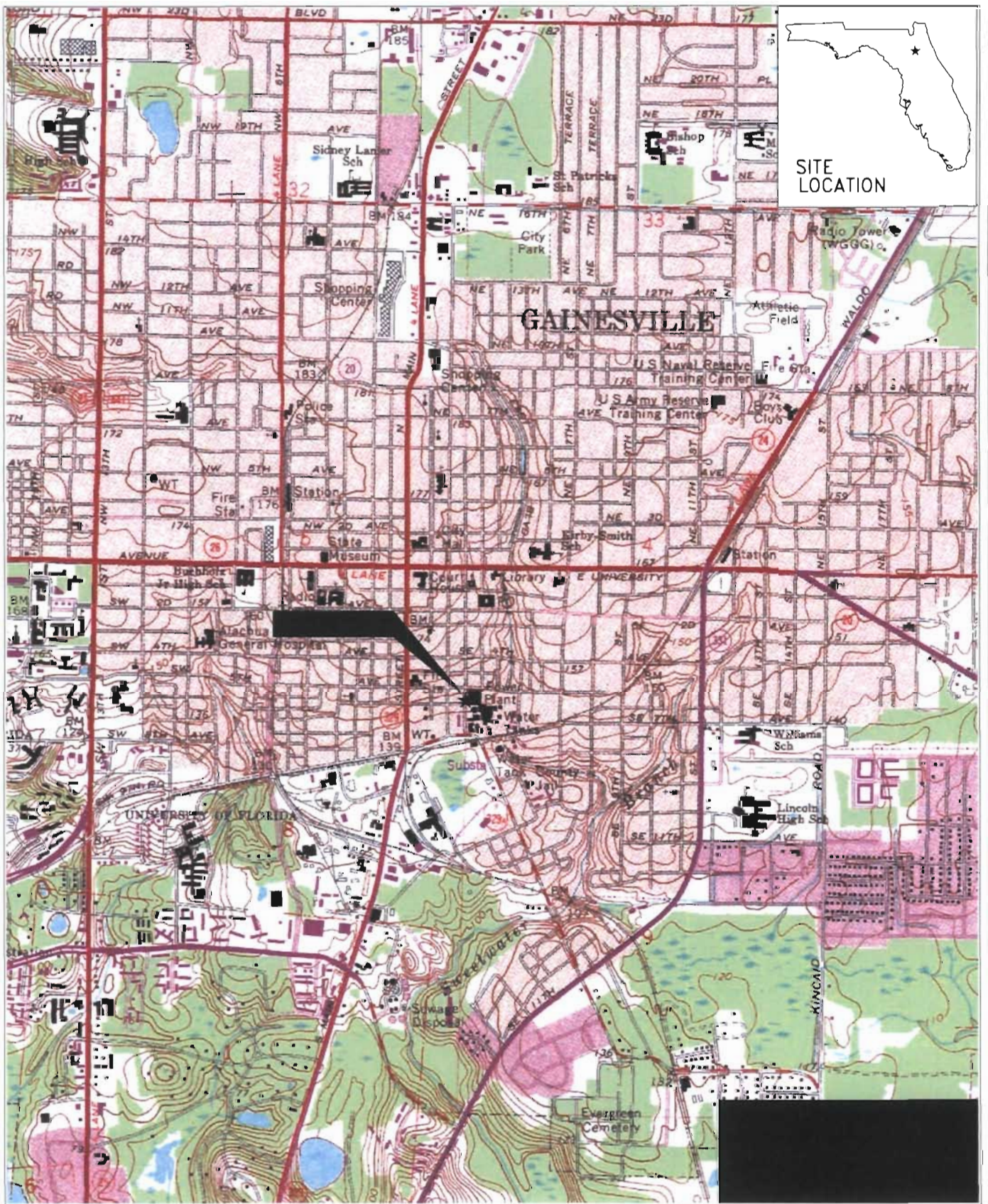
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment F</u>
2. Compliance Assurance Monitoring: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation: <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment L</u> <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Additional Requirements Comment

ATTACHMENT A
FACILITY LOCATION MAP



ATTACHMENT A.

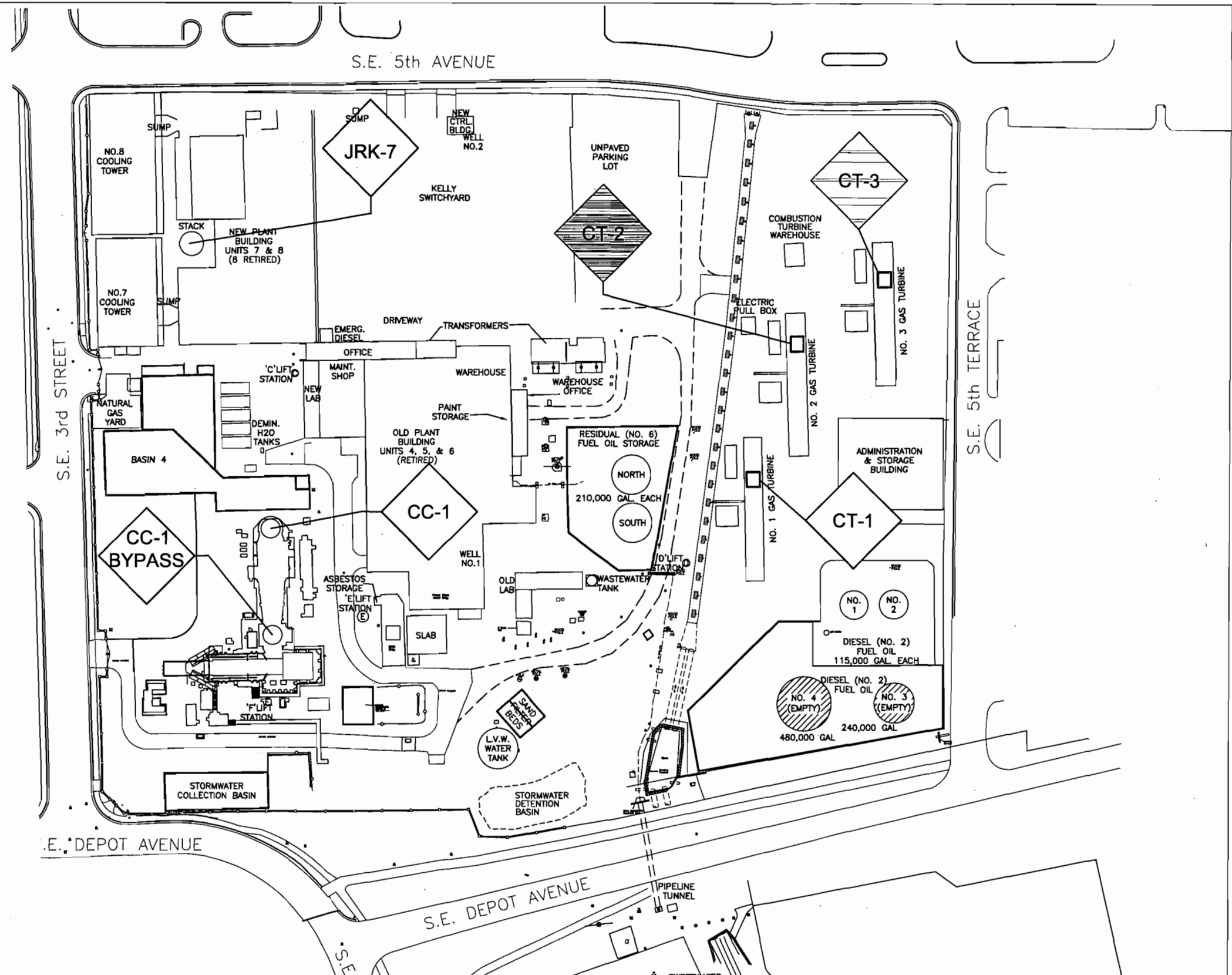
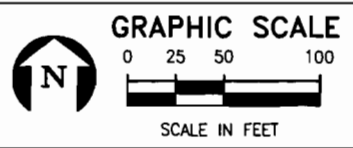
J. R. KELLY GENERATING STATION
FACILITY LOCATION MAP

Sources: USGS Quad; Gainesville East, 1988; ECT, 2008.



ATTACHMENTS B-1, B-2

FACILITY PLOT PLANS

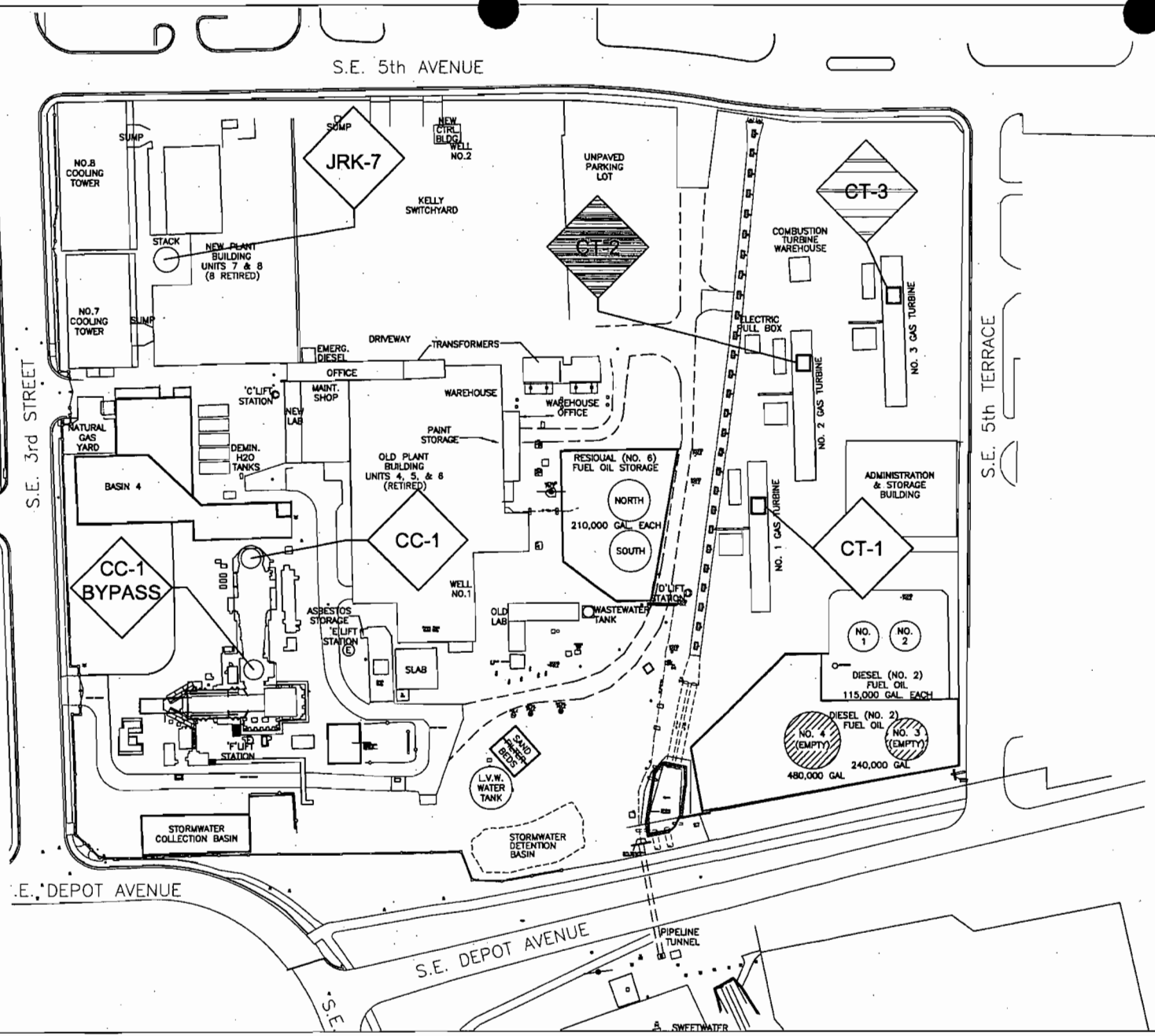
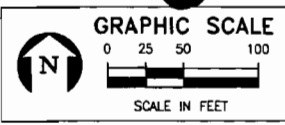


LEGEND

EMISSION POINT NUMBER AND LOCATION

ATTACHMENT B-2.
J. R. KELLY GENERATING STATION
GENERATING STATION PLOT PLAN
Source: ECT, 2008.



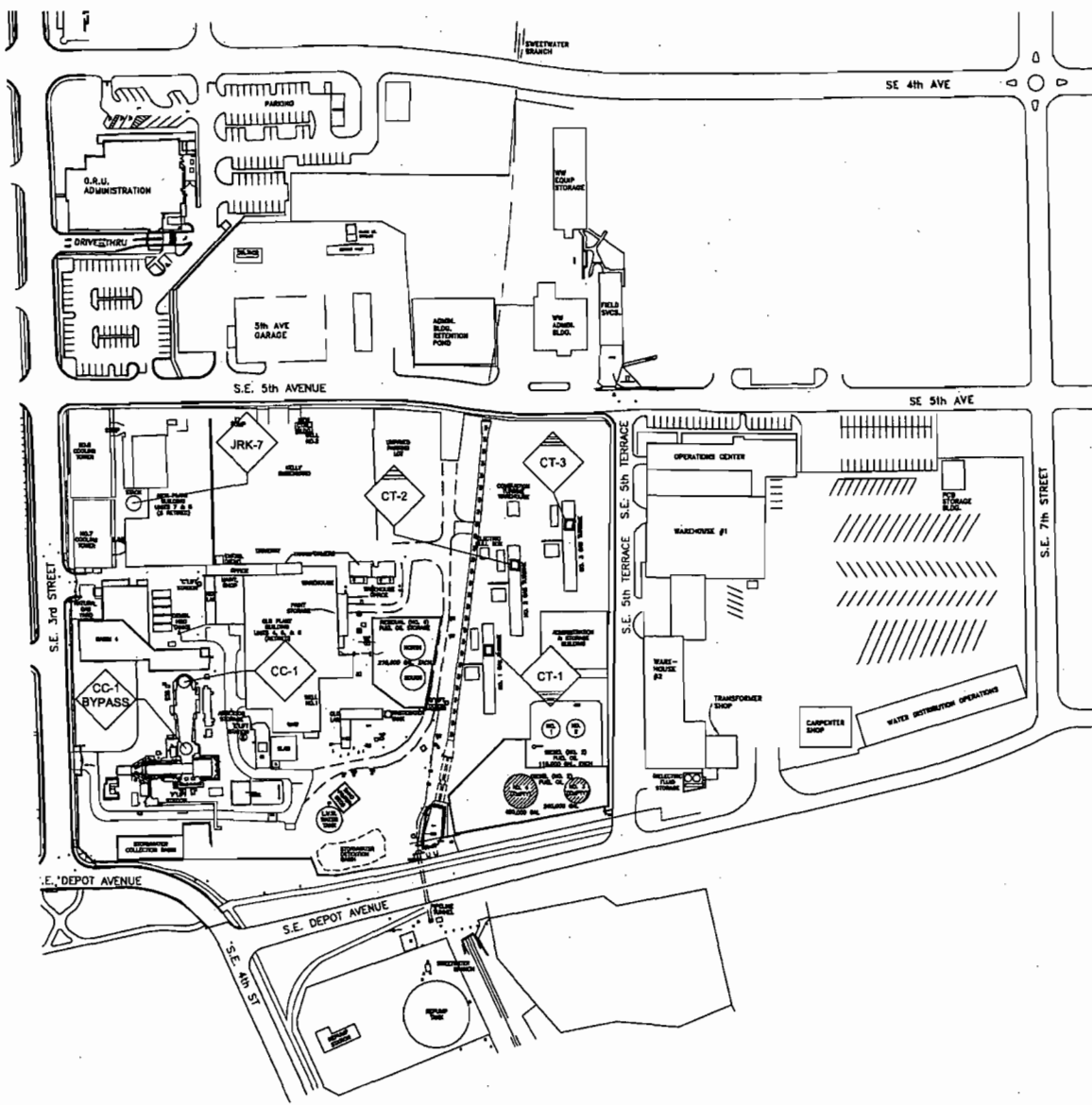
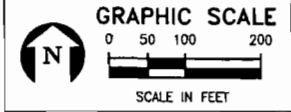


LEGEND

 EMISSION POINT NUMBER AND LOCATION

ATTACHMENT B-2.
J. R. KELLY GENERATING STATION
GENERATING STATION PLOT PLAN
Source: ECT, 2008.





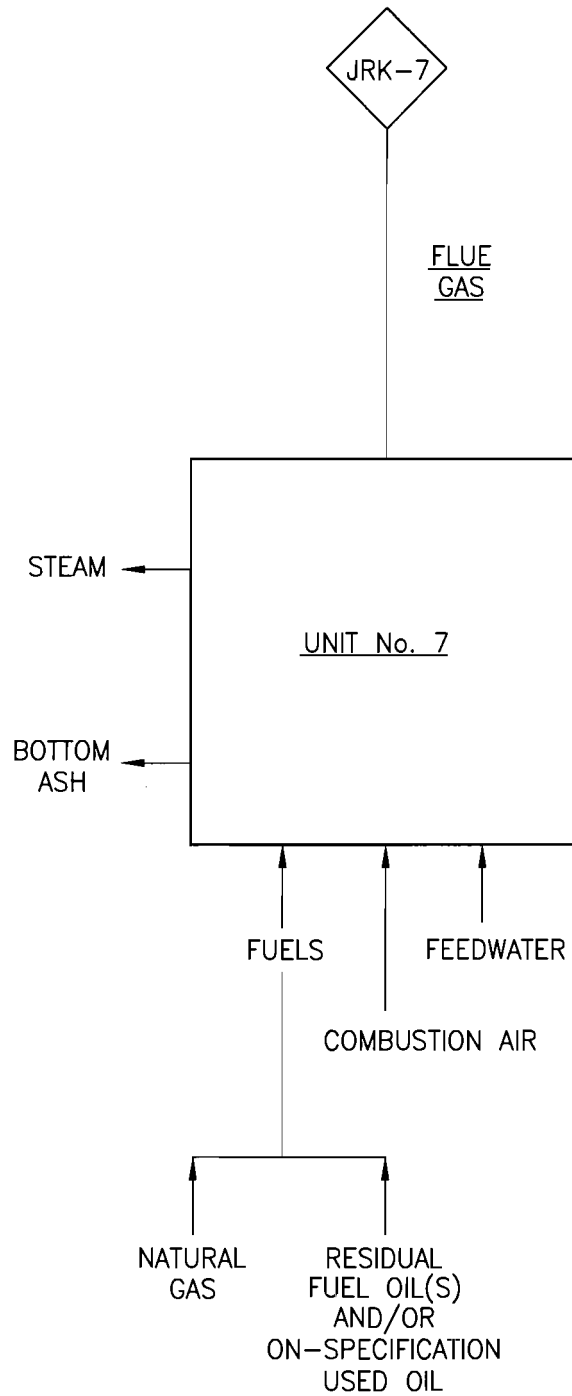
LEGEND

 EMISSION POINT
NUMBER AND LOCATION

ATTACHMENT B-1.
J. R. KELLY GENERATING STATION
FACILITY PLOT PLAN
Source: ECT, 2008.

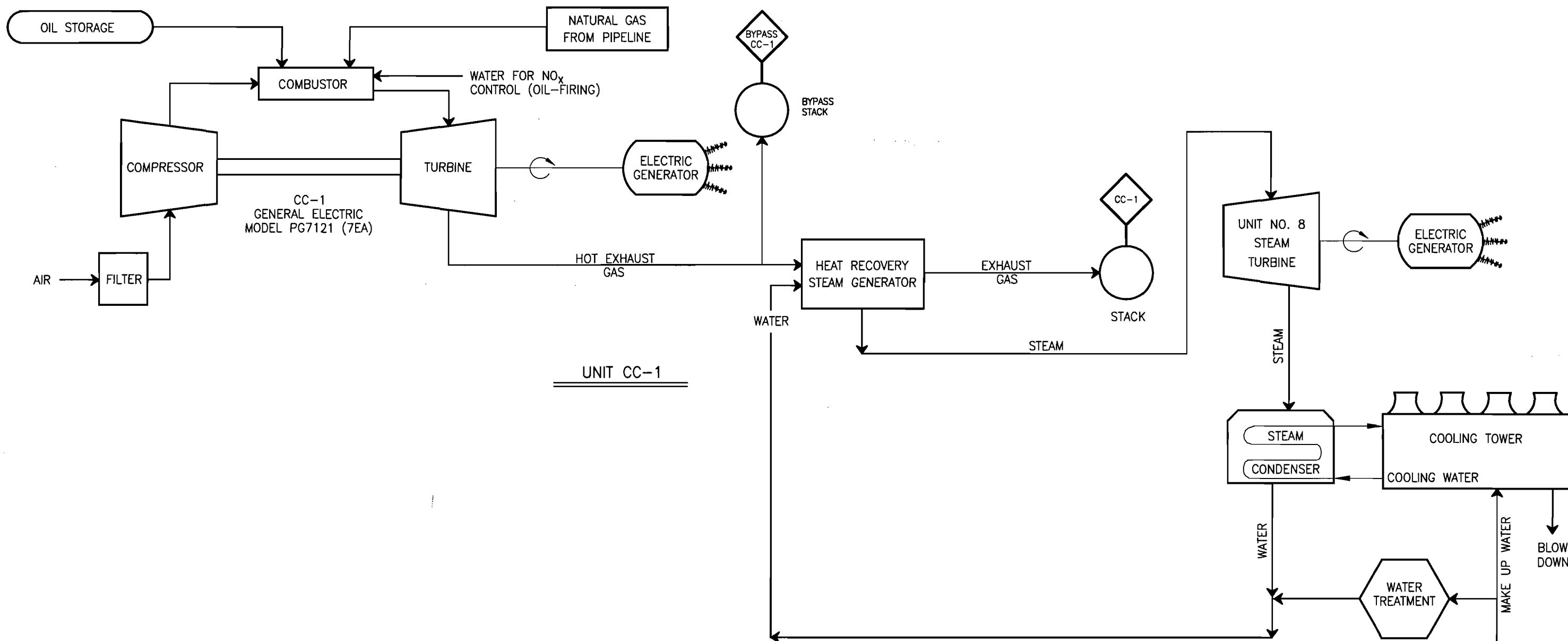


ATTACHMENTS C-1, C-2
PROCESS FLOW DIAGRAMS



ATTACHMENT C-1.
J. R. KELLY GENERATING STATION
UNIT 7 PROCESS FLOW DIAGRAM
Source: ECT, 2008.





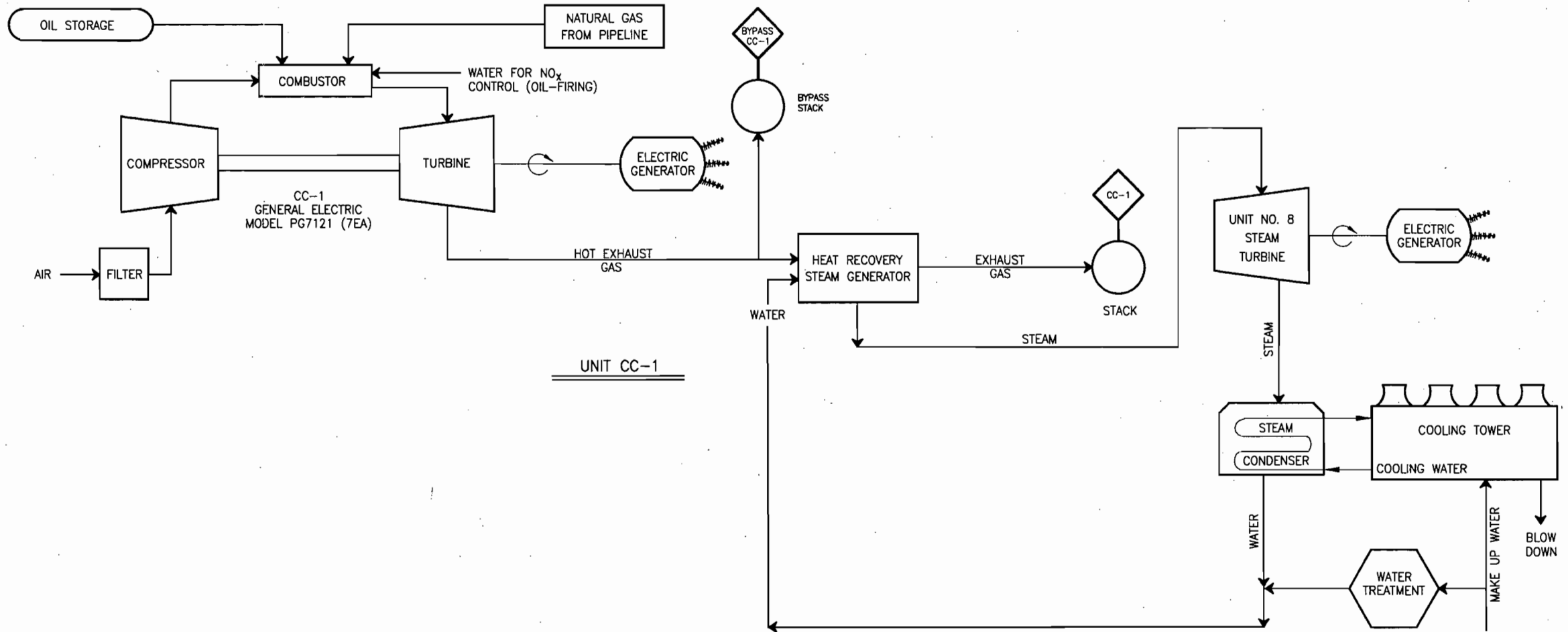
ATTACHMENT C-2.

J. R. KELLY GENERATING STATION UNIT CC-1

PROCESS FLOW DIAGRAM

Source: ECT, 2008.





UNIT CC-1

ATTACHMENT C-2.
 J. R. KELLY GENERATING STATION UNIT CC-1
 PROCESS FLOW DIAGRAM
 Source: ECT, 2008.



ATTACHMENT D

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

ATTACHMENT D

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter (PM) emissions that may result from operations at the J.R. Kelly Generating Station include:

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

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

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

ATTACHMENT E
LIST OF INSIGNIFICANT ACTIVITIES

ATTACHMENT E

LIST OF INSIGNIFICANT ACTIVITIES

Brief Description of Emissions Units and/or Activities

1. Internal combustion engines - mobile sources
2. Vacuum pumps for labs
3. Steam cleaning equipment
4. Lab equipment used for chemical or physical analyses
5. Brazing, soldering or welding equipment
6. One or more emergency generators located within a single facility provided:
 - a. None of the emergency generators is subject to the Federal Acid Rain Program.
 - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
7. One or more heating units and general purpose internal combustion engines, or other combustion devices, all of which are located within a single facility are not listed elsewhere in Rule 62-210.300(3)(a), F.A.C., and are not pollution control devices, provided:
 - a. None of the heating units, general purpose internal combustion engines, or other combustion devices that would be exempted is subject to the Federal Acid Rain Program.
 - b. Total fuel consumption by all such heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
8. Fire and safety equipment
9. Surface coating operation within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
 - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
10. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
11. Space heating equipment (non-boilers)
12. Parts cleaning and degreasing stations not subject to 40 CFR 63, Subpart T.
13. Degreasing units using heavier-than air vapors exclusively, not subject to 40 CFR 63, Subpart T.
14. One 480,000 (nominal) gallon storage tank for new residual fuel oils (Nos. 4, 5, or 6)/on-specification used oil or new distillate fuel oils (Nos. 1 or 2)
15. One 240,000 (nominal) gallon storage tank for new residual fuel oils (Nos. 4, 5, or 6)/on-specification used oil or new distillate fuel oils (Nos. 1 or 2)
16. Two 210,000 (nominal) gallon storage tanks for new residual fuel oils (Nos. 4, 5, or 6)/on-specification used oil or new distillate fuel oils (Nos. 1 or 2)

ATTACHMENT E

LIST OF INSIGNIFICANT ACTIVITIES

17. Two 115,000 (nominal) gallon storage tanks for new distillate fuel oils (Nos. 1 or 2) or new residual fuel oils (Nos. 4, 5, or 6)/on-specification used oil
18. One 6,000 (nominal) gallon underground storage tank for gasoline
19. One 15,000 (nominal) gallon underground storage tank for gasoline
20. One 20,000 (nominal) gallon underground storage tank for diesel
21. Turbine vapor extractor
22. Sand blasting and abrasive grit blasting
23. Vehicle refueling operations
24. Freshwater cooling towers. The cooling towers do not use chromium-based treatment chemicals.
25. Storage tanks less than 550 gallons
26. Architectural (equipment) maintenance painting.
27. No. 2 fuel oil, residual fuel oil, and used oil truck unloading.
28. Petroleum lubrication systems.
29. Any other emissions unit or activity that:
 - a. Is not subject to a unit-specific applicable requirement.
 - b. In combination with other units and activities proposed as insignificant, would not cause the J.R. Kelly Generating Station facility to exceed any major source threshold(s) as defined by Rule 62-213.420(3)(c)1., F.A.C. unless acknowledged in a permit application.
 - c. Would neither emit or have the potential to emit:
 - i. 500 pounds per year of lead and lead compounds expressed as lead;
 - ii. 1,000 pounds per year or more of any hazardous air pollutant;
 - iii. 2,500 pounds per year or more of total hazardous air pollutants; or
 - iv. 5.0 tons per year or more of any other regulated pollutant.

ATTACHMENT F

**IDENTIFICATION OF
APPLICABLE REQUIREMENTS**

ATTACHMENT F

IDENTIFICATION OF APPLICABLE REQUIREMENTS

A. FACILITY-WIDE REQUIREMENTS

Federal:

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

State:

CHAPTER 62-4, F.A.C.—PERMITS, effective 03-16-08

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

CHAPTER 62-210, F.A.C. STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 03-16-08

62-210.300, F.A.C.	Permits Required.
62-210.300(1), F.A.C.	Air Construction Permits.
62-210.300(2), F.A.C.	Air Operation Permits.
62-210.300(3), F.A.C.	Exemptions.
62-210.300(5), F.A.C.	Notification of Startup.
62-210.300(6), F.A.C.	Emissions Unit Reclassification.
62-210.300(7), F.A.C.	Transfer of Air Permits.
62-210.350, F.A.C.	Public Notice and Comment.
62-210.350(1), F.A.C.	Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.	Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.	Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

ATTACHMENT F

IDENTIFICATION OF APPLICABLE REQUIREMENTS

62-210.360, F.A.C.	Administrative Permit Corrections.
62-210.370(3), F.A.C.	Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.	Emission Estimates.
62-210.650, F.A.C.	Circumvention.
62-210.700, F.A.C.	Excess Emissions.
62-210.900, F.A.C.	Forms and Instructions.
62-210.900(1), F.A.C.	Application for Air Permit – Title V Source, Form and Instructions.
62-210.900(5), F.A.C.	Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.	Application for Transfer of Air Permit – Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C. STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 07-16-07

CHAPTER 62-213, F.A.C. OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 03-16-08

62-213.205, F.A.C.	Annual Emissions Fee.
62-213.400, F.A.C.	Permits and Permit Revisions Required.
62-213.410, F.A.C.	Changes Without Permit Revision.
62-213.412, F.A.C.	Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.	Trading of Emissions Within a Source.
62-213.420, F.A.C.	Permit Applications.
62-213.430, F.A.C.	Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.	Permit Content.
62-213.450, F.A.C.	Permit Review by EPA and Affected States
62-213.460, F.A.C.	Permit Shield.
62-213.900, F.A.C.	Forms and Instructions.
62-213.900(1), F.A.C.	Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.	Statement of Compliance Form.

CHAPTER 62-296, F.A.C. STATIONARY SOURCES - EMISSION STANDARDS, effective 02-07-08

62-296.320(4)(c), F.A.C.	Unconfined Emissions of Particulate Matter.
62-296.320(2), F.A.C.	Objectionable Odor Prohibited.

ATTACHMENT F

IDENTIFICATION OF APPLICABLE REQUIREMENTS

CHAPTER 62-297, F.A.C. STATIONARY SOURCES - EMISSIONS MONITORING, effective 02-12-04

62-297.310, F.A.C.	General Test Requirements.
62-297.330, F.A.C.	Applicable Test Procedures.
62-297.340, F.A.C.	Frequency of Compliance Tests.
62-297.345, F.A.C.	Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.	Determination of Process Variables.
62-297.570, F.A.C.	Test Report.
62-297.620, F.A.C.	Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C. DECISIONS DETERMINING SUBSTANTIAL INTERESTS

CHAPTER 62-110, F.A.C. EXCEPTION TO THE UNIFORM RULES OF PROCEDURE, effective 07-01-98

CHAPTER 62-256, F.A.C. OPEN BURNING AND FROST PROTECTION FIRES, effective 07-06-05

B. FOSSIL FUEL FIRED STEAM GENERATOR UNIT NO. 7—EU ID 007

62-296.405, F.A.C.	Fossil Fuel Steam Generators with More Than 250 Million Btu Per Hour Heat Input. (Effective 3/2/99)
FINAL Permit No.	0010005-005-AV, Section III., Emissions Unit No. 007, Permit Condition Nos. A.1. – A.25.

C. COMBINED-CYCLE UNIT CC1—EU ID 010

40 CFR 60, Subparts A and GG.	
40 CFR 72-75, 77, 78 (Acid Rain Program)	
62-296.470, F.A.C.	Implementation of Federal Clean Air Interstate Rule. (Effective 4/1/07)
FINAL Permit No.	0010005-005-AV, Section III., Emissions Unit No. 010, Permit Condition Nos. B.1. – B.41.

ATTACHMENT G
COMPLIANCE REPORT

ATTACHMENT G
COMPLIANCE REPORT

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

ATTACHMENT H

**LIST OF EQUIPMENT/ACTIVITIES
REGULATED UNDER TITLE VI**

ATTACHMENT H

LIST OF EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

Equipment located at the J.R. Kelly Generating Station that contains more than 50 pounds of charge of any Class I or II ozone depleting substance (ODS) regulated under Title VI of the Clean Air Act consists of one air conditioning (A/C) unit. Information regarding this A/C unit is provided as follows:

- Location—GRU Main Administration Building.
- Refrigerant—R-11.
- Amount of refrigerant charge—850 pounds.

ATTACHMENT I
ACID RAIN PART

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: New Revised Renewal

STEP 1

Identify the source by plant name, state, and ORIS or plant code.

J.R. Kelly Plant name	Florida State	0664 ORIS/Plant Code
---------------------------------	-------------------------	--------------------------------

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO₂ Opt-in unit, enter "yes" in column "b".

For new units or SO₂ Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO ₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO ₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
CC1	No	Yes	N/A	N/A
JRK8	No	Yes	N/A	N/A
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

J.R. Kelly

Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the DEP 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 DEP; 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.
- (4) For applications including a SO₂ Opt-in unit, a monitoring plan for each SO₂ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
 - (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,

**STEP 3,
Continued.**

J.R. Kelly

Plant Name (from STEP 1)

Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 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 or 72.8 shall be construed as:

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

**STEP 4
For SO₂ Opt-in
units only.**

In column "f" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

f	g	h (not required for renewal application)
Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application

ATTACHMENT J
FUEL SPECIFICATIONS

ATTACHMENT J

FUEL ANALYSES OR SPECIFICATIONS

A. No. 2 and Residual Fuel Oils

Specification	Units	No. 2 Fuel Oil CC-1	No. 2 Fuel Oil CT-1, CT-2, CT-3	Residual Fuel Oils
Heat Content (nominal)	BTU/gal (HHV)	137,000	137,000	150,000
Sulfur Content	Weight % (max.)	0.05	0.5	2.5
Ash Content	Weight % (max.)	0.05	0.05	0.1

B. Used Oil

Meets specifications of 40 CFR 279.11.

C. Natural Gas (typical composition)

Component	Mole Percent (by volume)
<u>Gas Composition</u>	
Hexane+	0.018
Propane	0.190
I-butane	0.010
N-butane	0.007
Pentane	0.002
Nitrogen	0.527
Methane	96.195
CO ₂	0.673
Ethane	2.379
<u>Other Characteristics</u>	
Heat content (HHV)	1,040 Btu/ft ³ at 14.73 psia, dry
Real specific gravity	0.5776
Sulfur content (maximum)	0.5 gr/100 scf

Note: Btu/ft³ = British thermal units per cubic foot.
 psia = pounds per square inch absolute.
 gr/100 scf = grains per 100 standard cubic foot.

ATTACHMENT K
PROCEDURES FOR STARTUP

ATTACHMENT K

PROCEDURES FOR STARTUP AND SHUTDOWN

A. UNIT NO. 7—FOSSIL FUEL STEAM GENERATOR (EU ID 007)

Generating Unit Startup

- Ensure all fluid levels are in limits.
- Insure fuel inventory is adequate.
- Ensure all fuel safety systems are in service.
- Ensure all valves/switches/breakers are set for startup.
- Establish fire in steam generator.
- Regulate firing rate to raise pressure and temperatures within established limits.
- At approximately 800 psig and saturation temperature +75 degrees Fahrenheit, begin steam admission to turbine.
- Increase turbine speed and firing rate in accordance with established operating limits until turbine speed reaches approximately 3,600 rpm.
- Synchronize generator to power grid and increase generator load to 5 percent.
- Ensure all required systems are in service and operable.
- Increase generator load to desired operating level.

Generating Unit Shutdown

- Reduce generator load and reduce pressure and temperature to established levels.
- Open generator breaker(s) to disconnect generator from power grid.
- Reduce fuel flow to minimum and trip fuel.
- Secure all operating and safety systems in accordance with established operating procedures.

B. COMBINED/SIMPLE CYCLE COMBUSTION TURBINE CC-1 (EU ID 010)

Starting Sequence

Upon receiving the startup signal from the plant control system, the turbine will proceed automatically through the following sequence:

1. Lube oil pump starts.
2. Compressor for clutch air starts and clutch is engaged.
3. Turning gear starts.
4. Starting device runs and accelerates from low speed. Turning gear shutdown at 20-percent speed.
5. At approximately 20-percent speed, the ignition is turned on and fuel is injected. The machine accelerates to approximately 55-percent speed; starting device clutch disengages and starting device shuts down.

ATTACHMENT K

PROCEDURES FOR STARTUP AND SHUTDOWN

6. The unit is run at 95-percent speed for the required warmup period and then accelerated to synchronous speed.

Shutdown Sequence

1. The unit runs for the required length of time at idle speed to assure proper cool down.
2. A relay turns the control switch to off and fuel is shut down. The lube oil pump starts at approximately 80-percent speed and the machine continues deceleration.
3. Clutch is engaged.
4. The turning gear starts and drives machine spindle for completion of the cooling off period.
5. The clutch is disengaged and turning gear and lube oil pump shut down.

ATTACHMENT L

ALTERNATE METHODS OF OPERATION

ALTERNATIVE L

ALTERNATIVE METHODS OF OPERATION

UNIT No. 7—FOSSIL FUEL STEAM GENERATOR (EU ID 007)

Method Number	Fuel Type	Fuel Sulfur Content (wt %)	Heat Range Input (MMBtu/hr)	Maximum Operating Hours		
				hr/day	day/week	hr/yr
1	Natural gas	N/A	0 to 272.0	24	7	8,760
2	Residual fuel oil/used oil	2.5	0 to 249.0	24	7	8,760
3	Co-firing Natural gas Residual fuel oil/used oil	N/A N/A 2.5	0 to 272.0	24	7	8,760

SIMPLE-CYCLE COMBUSTION TURBINES CT-1, CT-2, AND CT-3 (EU ID 009)

Method Number	Fuel Type	Fuel Sulfur Content (wt %)	Heat Range Input (MMBtu/hr)	Maximum Operating Hours		
				hr/day	day/week	hr/yr
1	Natural gas	N/A	0 to 200.0	24	7	8,760
2	No. 2 fuel oil	N/A	0 to 207.0	24	7	8,760

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ALTERNATIVE L

ALTERNATIVE METHODS OF OPERATION

COMBINED/SIMPLE-CYCLE COMBUSTION TURBINE CC-1 (EU ID 010)

Method Number	Fuel Type	Fuel Sulfur Content (wt %)	Heat Range Input (MMBtu/hr)	Maximum Operating Hours		
				hr/day	day/week	hr/yr
1	Natural gas	N/A	0 to 1,083	24	7	8,760
2	No. 2 fuel oil	N/A	0 to 1,121	24	7	8,760

*Upper range of loads shown are at 100-percent load, 20°F, 14.7 psia, and 60-percent relative humidity conditions.

Source: ECT, 2008.

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