

APPLICATION FOR TITLE V PERMIT RENEWAL

JEA – Brandy Branch Generating Station

Prepared For: JEA

21 West Church Street Jacksonville, FL 32202

Submitted By: Golder Associates Inc.

6026 NW 1st Place

Gainesville, FL 32607 USA

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2 copies – JEA

1 copy - Golder Associates Inc.

May 2013

123-87691



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APPLICATION FOR AIR PERMIT

LONG FORM



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:

1. Facility Owner/Company Name: JEA

- 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

		* *				
2.	Site Name:	Brandy Branch Gene	erating Sta	tion		
3.	Facility Iden	tification Number: (310485			
4.	Facility Loca	ation				
	Street Addre	ss or Other Locator:	15701 Bea	aver :	Street West	
	City: Baldwi	in City	County: I	Duva		Zip Code: 32234
5.	Relocatable	Facility?		6.	Existing Title	V Permitted Facility?
	☐ Yes	⊠ No			⊠ Yes	☐ No
<u>Ap</u>	plication Co	<u>ntact</u>				
1.	Application	Contact Name: Jay A	A Worley			
2.	Application	Contact Mailing Add	lress			
	Organization	/Firm: JEA				
	Street Ac	ddress: 21 West Chu	rch Street			
		City: Jacksonville	St	ate:	FL	Zip Code: 32202-3139
3.	Application	Contact Telephone N	lumbers			
	Telephone:	(904) 665-8729	ext.]	Fax: (904) 665	-7376
4.	4. Application Contact E-mail Address: worlja@jea.com					
<u>Ap</u>	Application Processing Information (DEP Use)					
		ipt of Application:	20	- 3	PSD Number	r (if applicable):
2.	Project Numb	per(s):03 045	020	AVA	. Siting Numb	er (if applicable):

Purpose of Application

Scope of Application

Emissions		Air	Air Permit
Unit ID	Description of Emissions Unit	Permit	Processing
Number		Type	Fee
001	Unit 1 – 170 MW Simple Cycle Combustion Turbine	AF2A	NA
002	Unit 2 – 170 MW Combined Cycle Combustion Turbine with Supplementary Fired HRSG	AF2A	NA
003	Unit 3 – 170 MW Combined Cycle Combustion Turbine with Supplementary Fired HRSG	AF2A	NA
007	Water Cooling – One Fresh Water Mechanical Draft Cooling Tower	AF2C	NA

Application Processing Fee	
Check one: Attached - Amount: \$	Not Applicable

Owner/Authorized Representative Statement

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

1.	Owner/Authorized Represent	tative Name :				
2.	Owner/Authorized Representative Mailing Address Organization/Firm:					
	Street Address:					
	City:	State:			Zip Code:	
3.	Owner/Authorized Represent	ative Telephone N	umbers			
	Telephone: ()	ext.	Fax:	()	
4.	Owner/Authorized Represent	ative E-mail Addre	ess:			
5.	Owner/Authorized Represent	ative Statement:				
	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.					
	Signature Date					

Application Responsible Official Certification

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

	_ <u> </u>				
1.	Application Responsible Official Name: Mr. Michael J. Brost, P.E., President, Electric Systems				
2.	Application Responsible Official Qualification (Check one or more of the following options, as applicable):				
	For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.				
	 For a partnership or sole proprietorship, a general partner or the proprietor, respectively. ✓ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. 				
	The designated representative at an Acid Rain source or CAIR source.				
3.	Application Responsible Official Mailing Address Organization/Firm: JEA				
	Street Address: 21 W. Church Street				
	City: Jacksonville State: FL Zip Code: 32202				
4.	Application Responsible Official Telephone Numbers Telephone: (904) 665-7547 ext. Fax: (904) 665-4238				
5.	Application Responsible Official E-mail Address: Brosmj@jea.com				
6.	Application Responsible Official Certification:				
app that of n reas poll to c star revi the be t dep cert requ	the undersigned, am a responsible official of the Title V source addressed in this air permit lication. I hereby certify, based on information and belief formed after reasonable inquiry, the statements made in this application are true, accurate and complete and that, to the best my knowledge, any estimates of emissions reported in this application are based upon sonable techniques for calculating emissions. The air pollutant emissions units and air lution control equipment described in this application will be operated and maintained so as omply with all applicable standards for control of air pollutant emissions found in the lutes of the State of Florida and rules of the Department of Environmental Protection and asions thereof and all other applicable requirements identified in this application to which Title V source is subject. I understand that a permit, if granted by the department, cannot ransferred without authorization from the department, and I will promptly notify the artment upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I lify that the facility and each emissions unit are in compliance with all applicable unrements to which they are subject, except as identified in compliance plan(s) submitted in this application.				
	$\frac{5 - (4 - (3))}{\text{Date}}$				

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

Professional Engineer Certification

1.	Professional Engineer Name: Kennard F. Kosky			
	Registration Number: 14996			
2.	Professional Engineer Mailing Address			
	Organization/Firm: Golder Associates Inc.**			
	Street Address: 6026 NW 1st Place			
	City: Gainesville State: FL Zip Code: 32607			
3.	Professional Engineer Telephone Numbers			
	Telephone: (352) 336-5600 ext. 21156 Fax: (352) 336-6603			
4.	Professional Engineer E-mail Address: kkosky@golder.com			
5.	Professional Engineer Statement:			
	I, the undersigned, hereby certify, except as particularly noted herein*, that:			
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and			
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.			
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here \boxtimes , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.			
	(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.			
	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. Signature State S			
<u>*</u>	Attach any exception to certification statement			

**Board of Professional Engineers Certificate of Authorization #00001670.

DEP Form No. 62-210,900(1) — Form Effective: 03/11/2010

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1.	Facility UTM Coordinates			2. Facility Latitude/Longitude			
	Zone 17 East (km) 408.81			Latitude (DD/MM/SS) 30 / 19 / 14			
	North (km) 3354.38			Longitude (DD/MM/SS) 81/56/55			
3.	Governmental	4. Facility Status	5.	Facility Major	6. Facility SIC(s):		
	Facility Code:	Code:	ļ	Group SIC Code:			
	4	Α		49	4911		
7.	Facility Comment:						
	Facility consists of three combustion turbines, two heat recovery steam generators, two fuel oil storage tanks, and a mechanical draft cooling tower.						

Facility Contact

1.	Facility Contact Name: Jay A Worley, Director of Environmental Programs Fig. 11: Contact Mail: Additional Programs				
2.	Facility Contact Mailing Address Organization/Firm: JEA	S			
	Street Address: 21 West Chui	rch Street			
	City: Jacksonville	State: FL	Zip Code: 32202		
3.	Facility Contact Telephone Num!	bers:	-		
	Telephone: (904) 665-8729	ext.	Fax: (904) 665-7376		
4.	Facility Contact E-mail Address:	worlja@jea.com			

Facility Primary Responsible Official

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

	• • •			_	
1.	Facility Primary Responsible	Official Name:			
2.	Facility Primary Responsible Official Mailing Address Organization/Firm:				
	Street Address:				
	City:	State:		Zip Code:	
3.	Facility Primary Responsible	Official Telephon	e Numbers		
	Telephone: ()	ext. `	Fax: ()	
4.	Facility Primary Responsible	Official E-mail A	ddress:		

Facility Regulatory Classifications

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

1. ☐ Small Business Stationary Source ☐ Unknown					
2. Synthetic Non-Title V Source					
3. Title V Source					
4. Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)					
5. Synthetic Minor Source of Air Pollutants, Other than HAPs					
6. Major Source of Hazardous Air Pollutants (HAPs)					
7. Synthetic Minor Source of HAPs					
8. One or More Emissions Units Subject to NSPS (40 CFR Part 60)					
9. One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)					
10. One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)					
11. Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))					
12. Facility Regulatory Classifications Comment:					
12. Facility Regulatory Classifications Comment.					
Simple-cycle CT No. 1 (EU 001) and combined-cycle CT Nos. 2 and 3 (EUs 002 and 003) are subject to NSPS Subpart GG, Standards of Performance for Stationary Gas Turbines.					
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Simple-cycle CT No. 1 (EU 001) and combined-cycle CT Nos. 2 and 3 (EUs 002 and 003) are subject to NSPS Subpart GG, Standards of Performance for Stationary Gas Turbines. The facility has one reciprocating internal combustion engine (RICE) that is subject to					
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List of Pollutants Emitted by Facility

1. Dollytent England	2 Pollutant Classification	2 Emissions Con
1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NOX	A	Z
СО	A	N
voc	В	N
SO2	Α	Y
PM	Α	N
PM10	A	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility- Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
SO2	N	Units 2 and 3	See comment	See comment	ESCPSD
			-		
			_		
			-		

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

Combined maximum 576 actual plus equivalent hours of fuel oil firing for the two combined cycle combustion turbines (Units 2 and 3) per consecutive 12-month period while firing 0.05% sulfur by weight fuel oil. Combined maximum 1,478 actual plus equivalent hours of fuel oil firing for the two combined cycle combustion turbines (Units 2 and 3) per consecutive 12-month period while firing lower sulfur fuel oil (0.0065% sulfur, by weight).

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☑ Attached, Document ID: BB-FI-C1 ☐ Previously Submitted, Date:						
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☑ Attached, Document ID: See EU Sections ☐ Previously Submitted, Date:						
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-FI-C3 Previously Submitted, Date:						
Ac	Additional Requirements for Air Construction Permit Applications						
1.	Area Map Showing Facility Location: Attached, Document ID: Not Applicable (existing permitted facility)						
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): Attached, Document ID:						
3.	Rule Applicability Analysis: Attached, Document ID:						
4.	List of Exempt Emissions Units: Attached, Document ID: Not Applicable (no exempt units at facility)						
5.	Fugitive Emissions Identification: Attached, Document ID: Not Applicable						
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): Attached, Document ID: Not Applicable						
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): Attached, Document ID: Not Applicable						
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): Attached, Document ID:						
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): Attached, Document ID: Not Applicable						
10.	. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): Attached, Document ID: Not Applicable						

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1	. List of Exempt Emissions Units: ☐ Attached, Document ID: ☐ Not Applicable (no exempt units at facility)
A	Additional Requirements for Title V Air Operation Permit Applications
1	. List of Insignificant Activities: (Required for initial/renewal applications only) ☑ Attached, Document ID: BB-FI-CV1 ☐ 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)
3	. Compliance Report and Plan: (Required for all initial/revision/renewal applications) ☑ Attached, Document ID: BB-FI-CV3 Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4	 List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only) ☐ Attached, Document ID: ☐ Equipment/Activities Onsite but Not Required to be Individually Listed ☒ Not Applicable
5	 Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only) △ Attached, Document ID: BB-FI-CV5 □ Not Applicable
6	Requested Changes to Current Title V Air Operation Permit: ✓ Attached, Document ID: BB-FI-CV6 ☐ Not Applicable

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)):
	☐ 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.	(
	★ Attached, Document ID: BB-FI-CA2
	☐ Not Applicable (not a CAIR source)
Ac	dditional Requirements Comment
1	

ATTACHMENT BB-FI-C1
FACILITY PLOT PLAN



LEGEND

EMISSION UNIT

REFERENCES

1. EMISSION UNITS: GOLDER ASSOCIATES INC., 2013 2. AERIAL. ARC GIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010

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REV	DATE	DES		REVISION DESCRI	IPTION	GIS	S CHK	RVM

JEA **BRANDY BRANCH FACILITY**

SITE LAYOUT

-	PROJECT NO	123-8769
	DESIGN	JDG
Golder	GIS	JDG
Accordates	CHECK	TC
Associates	REVIEW	SKM

ECT NO	123-87691		FILE No. 123-67691A002			
SIGN	JDG	04/25/2013	SCALE	AS SHOWN	REV 0	
SIS	JDG	04/29/2013				
ECK	TC	04/29/2013	1	BB-FI-	C1	
JIEW	SKM	04/29/2013	1			

ATTACHMENT BB-FI-C3

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

May 2013 123-87691

ATTACHMENT BB-FI-C3 PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- Using paved roads, parking areas, and equipment yards
- Maintenance of paved areas as needed
- Regular mowing of grass and care of vegetation
- Limiting access to plant property by unnecessary vehicles

[Permit No. 0310485-019-AV]



ATTACHMENT BB-FI-CV1

LIST OF INSIGNIFICANT ACTIVITIES

ATTACHMENT BB-FI-CV1 LIST OF INSIGNIFICANT ACTIVITIES

A list of existing units and/or activities that are considered to be insignificant and are exempted from Title V permitting under Rule 62-213.430(6) is presented below. The exempt activities listed are also those activities that are included in Rule 62-210.300(3)(a), which would not exceed the thresholds in Rule 62-213.430(6)(b)3.

Brief Description of Emissions Units and/or Activities:

- Sand blaster, welding, lathes, hand-held tools, etc.
- Fire water tank(s)
- Brazing, soldering, or welding equipment and related shop activities
- Fire and safety equipment
- Fuel Storage Tanks
- Surface coating operations 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:
 - Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b) The amount of coatings used will include any solvents and thinners used in the process including those used for cleanup.
- Two indirect natural gas heaters.



ATTACHMENT BB-FI-CV2

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT BB-FI-CV2a IDENTIFICATION OF APPLICABLE REQUIREMENTS

The FDEP version Title V Core List has been referenced in its entirety.

The facility is subject to the following federal regulations:

Acid Rain, Phase I and II

Clean Air Interstate Rule (CAIR)

40 CFR 60, Subpart A: Standards of Performance for New Stationary Sources, General Provisions.

40 CFR 63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

40 CFR 60, Subpart GG: Standards of Performance for Stationary Gas Turbines

40 CFR 98, Subpart A: Manadatory Reporting of Greenhouse Gases

40 CFR 98, Subpart C: General Stationary Combustion Sources

40 CFR 98, Subpart D: Electricity Generation



ATTACHMENT BB-FI-CV2b IDENTIFICATION OF APPLICABLE REQUIREMENTS TITLE V CORE LIST

Effective: 06/15/12

(Updated based on current version of FDEP Air Rules)

[Note: The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal: (description)

40 CFR 61, Subpart M: NESHAP for Asbestos. 40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).

40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: (description)

CHAPTER 62-4, F.A.C.: PERMITS, effective 12-01-11

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. 10-31-07

62-4.055, F.A.C.: Permit Processing. 8-16-98

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. 3-16-08

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 6-29-11

62-210.300, F.A.C.: Permits Required.

62-210.300(1), F.A.C.: Air Construction Permits.

62-210.300(2), F.A.C.: Air Operation Permits.

62-210.300(3), F.A.C.: Exemptions from Permitting.

62-210.300(5), F.A.C.: Notification of Startup.

62-210.300(6), F.A.C.: Emissions Unit Reclassification.

62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment. 10-12-08.

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.
- 62-210.360, F.A.C.: Administrative Permit Corrections and Amendments. 3-16-08
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility. 7-3-08

62-210.650, F.A.C.: Circumvention.

62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.

62-210.900(1), F.A.C.: Application for Air Permit – Long Form, Form and Instructions. 3-11-10

62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions. 7-3-08

62-210.900(7), F.A.C.: Application for Transfer of Air Permit - Title V and Non-Title V Source. 7-3-08

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 12-04-11

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 6-29-11

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(2), F.A.C.: Statement of Compliance Form.

62-213.900(3), F.A.C.: Responsible Official Notification Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-11-10

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

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

62-297.310, F.A.C.: General Compliance Test Requirements.

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 10-06-08

CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 10-12-08

CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96



ATTACHMENT BB-FI-CV3

COMPLIANCE REPORT AND PLAN



Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

ĺ	80 Ann	ua) Requirement		Transfer of Permit		Permanent Facility	y Shutdown
	REPORTING PERIOD*				REPORT DEA	DLINE**	
		January 1 through	<u>December</u>	·31 of 2012 (year	ar)	March 1, 2013	
	period, ir		ns that were	r all conditions that added, deleted, or cha			ated reporting
Fa	cility Ow	vner/Company Name:	JEA				
Sit	e Name:	Brandy Branch Ger	nerating	Facility ID No. 0	310485	County:	Duval
CO	MPL1A	NCE STATEMENT	(Check onl	y one of the followin	g three opt	ions)	
X	app requ	licable, the Acid Ra uirements associated	ain Part, an with any m	with all terms and con id there were no rep alfunction or breakdon aring the reporting per	ortable income of proc	idents of deviations cess, fuel burning or	from applicable
	B. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:						
	1. 2.	Date of report previ Description of the in	-	itted identifying the in	cident of de	eviation.	
	app repo of p ider	licable, the Acid Ra ortable incidents of de process, fuel burning	in Part, EX eviations fro or emission	with all terms and conficer those identification applicable required control equipment, out to the Department.	ed in the p nents associ r monitorin	ages attached to this ated with malfunction g systems during the	s report and any ns or breakdown reporting period
	1. 2.	Emissions unit iden Specific permit con- changed during cert	dition numb	er (note whether the p	ermit cond	ition has been added,	deleted, or
	3.		•	of the permit condition	n.		
	4.			oncompliance (for mo	-	-	ther monitoring
	5.	Beginning and endi	ng dates of p	periods of noncomplia	nce.		
		I domain and a confirmation of the	. 1. (1	C			

- Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
- 7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph B. above, the following information is included:

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

DEP Form No. 62-213.900(2)

Effective: August 1, 2011

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

(Signature of Title V Source Responsible Official)

(Date)

Name: Michael J. Brost Title: VP/General Manager Electric Systems

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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

(Signature of Acid Rain Source Designated Representative)

(Date)

Name: Michael J. Brost Title: VP/General Manager Electric Systems

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

DEP Form No. 62-213.900(2)

Effective: August 1, 2011

Brandy Branch Simple Cycle # 1 Permit Summary Report

Quarter 2, 2012

Description	Number of Exceedances	Permit Limit
24 Hour NOx Exceedances (GAS):	0	69.3 lb/hr
3 Hour NOx Exceedances (OIL):	0	42 ppm

Brandy Branch Simple Cycle # 1 Permit Summary Report Quarter 4, 2012

Description	Number of Exceedances	Permit Limit
24 Hour NOx Exceedances (GAS):	0	69.3 lb/hr
3 Hour NOx Exceedances (OIL):	n	42 npm

Brandy Branch Combined Cycle # 2 Permit Summary Report Quarter 2, 2012

Standard Permit Criteria

<u>I</u>	Description	Number of Exceedances	Permit Limit
3	Hour NOx Exceedances (GAS):	0	3.5 ppm
3	Hour NOx Exceedances (OIL):	0	15 ppm
3	Hour NH3 Exceedances (GAS):	0	5 ppm
3	Hour NH3 Exceedances (OIL):	0	5 ppm
2	4 Hour CO Exceedances:	0	14 ppm

Description	Number of Exceedances	Permit Limit
NOx Total Pounds Exceedances:	0	3000 lbs (GAS) 8880 lbs (OIL)
CO Total Pounds Exceedances:	0	4200 lbs

Brandy Branch Combined Cycle # 2 Permit Summary Report Quarter 4, 2012

Standard Permit Criteria

Description	Number of Exceedances	Permit Limit
3 Hour NOx Exceedances (GAS):	0	3.5 ppm
3 Hour NOx Exceedances (OIL):	0	15 ppm
3 Hour NH3 Exceedances (GAS):	0	5 ppm
3 Hour NH3 Exceedances (OIL):	0	5 ppm
24 Hour CO Exceedances:	0	14 ppm

Description	Number of Exceedances	Permit Limit
NOx Total Pounds Exceedances:	0	3000 lbs (GAS) 8880 lbs (OIL)
CO Total Pounds Exceedances:	0 .	4200 lbs

Brandy Branch Combined Cycle # 3 Permit Summary Report Quarter 2, 2012

Standard Permit Criteria

Description	Number of Exceedances	Permit Limit
3 Hour NOx Exceedances (GAS):	0	3.5 ppm
3 Hour NOx Exceedances (OIL):	0	15 ppm
3 Hour NH3 Exceedances (GAS):	0	5 ppm
3 Hour NH3 Exceedances (OIL):	0	5 ppm
24 Hour CO Exceedances:	0	14 ppm

Description	Number of Exceedances	Permit Limit
NOx Total Pounds Exceedances:	0	3000 lbs (GAS) 8880 lbs (OIL)
CO Total Pounds Exceedances:	0	4200 lbs

Brandy Branch Combined Cycle # 3 Permit Summary Report Quarter 4, 2012

Standard Permit Criteria

Description	Number of Exceedances	Permit Limit
3 Hour NOx Exceedances (GAS):	0	3.5 ppm
3 Hour NOx Exceedances (OIL):	0	15 ppm
3 Hour NH3 Exceedances (GAS):	0	5 ppm
3 Hour NH3 Exceedances (OIL):	0	5 ppm
24 Hour CO Exceedances:	0	14 ppm

Description -	Number of Exceedances	. Permit Limit
NOx Total Pounds Exceedances:	0	3000 lbs (GAS) 8880 lbs (OIL)
CO Total Pounds Exceedances:	0	4200 lbs



Facility Name: Brandy Branch Generating Station

EPA ID: 1000 0018 9583



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

JEA 102 Kernan Blvd. North Jacksonville, FL 32225

EPA Facility ID#:

1000 0018 9583

June 09, 2008

Barcode Number:

MRM-2004-2-011760-2

Postmark Date:

10/20/2004

Anniversary Date:

10/20/2009

NOTIFICATION LETTER: COMPLETE RMP

The U.S. Environmental Protection Agency (EPA) received your Risk Management Plan (RMP) dated with the above postmark date. This letter notifies you that your RMP is "complete" according to EPA's completion check. The completion check is a program implemented by EPA to determine whether a submitted RMP includes the minimum amount of information every RMP must provide. The completion check does not assess whether a submitted RMP should have provided additional information or whether the information it provides is accurate or appropriate. In other words, it does not indicate that the RMP meets the requirements of 40 CFR Part 68.

Please note the anniversary date indicated above. Your RMP must be revised and updated by this date or earlier as required by 40 CFR §68.190. Please also note your EPA Facility ID number as identified a the top of this letter; all future Risk Management Plan submissions, corrections and other correspondence must include this number.

If you have any questions, please call one of the following numbers:

- (1) For RMP rule interpretation questions, call the EPCRA Hotline at (800)424-9346 or (703)412-9810 (in the D.C. Metro area).
- (2) For RMP*Submit installation and software questions, or information on the status of your RMP, contact the RMP Reporting Center at 301-429-5018, or write to the:

Risk Management Plan (RMP) Reporting Center P.O. Box 1515
Lanham-Seabrook, Maryland 20703-1515

(3) For more information on the Risk Management Program, you can contact your Implementing Agency. Your Implementing Agency is

State of Florida, Department of Community Affairs, 2555 Shumard Oak Boulevard, Tallahassee, FL, 32399, Phone: 850-413-9970.

Thank you for your cooperation in this matter.

Sincerely,

RMP Reporting Center

Enclosure:

Risk Management Plan (if submitted on paper)

ATTACHMENT BB-FI-CV6

REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

May 2013 123-87691

ATTACHMENT BB-FI-CV6 REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

40 CFR 63 Subpart ZZZZ Applicability

On behalf of the Jacksonville Electric Authority (JEA), Golder Associates Inc. (Golder) has prepared an inventory of stationary Reciprocating Internal Combustion Engines (RICE) at the Brandy Branch Generating Station. The purpose of the inventory was to analyze applicability of Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63), Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for stationary RICE to these engines. One stationary RICE at the Brandy Branch Generating Station has been listed in the inventory: Fire Pump Engine.

The detailed RICE applicability analysis has been attached in the following tables. A summary of the engine manufacturer, model, serial number, power rating, number of cylinders, cylinder displacement, installation date, and the RICE NESHAP applicability analysis is presented in Table 1. As shown, the Fire Pump Engine is subject to the RICE NESHAP.

JEA requests that the Subpart ZZZZ applicability requirements for this engine be included in the renewed Title V permit.

Fuel Oil Storage Tanks (EUs 004 and 005)

The facility currently has two one-million gallon fuel oil storage tanks (EUs 004 and 005) listed as regulated emissions units. These tanks are not subject to any applicable requirements. The potential volatile organic compound (VOC) emissions from each tank were estimated to be less than 1 ton per year (TPY). Since there are no applicable requirements for the storage tanks and the potential emissions of the only regulated air pollutant emitted from each tank are less than 5 TPY, JEA is requesting that per Rule 62-210.300(3)(b), these tanks be granted insignificant emission unit status and listed in Appendix I. The potential VOC emissions were calculated using EPA's TANKS4 program and the output is attached.



May 2013 123-87691

TABLE 1
APPLICABLE REQUIREMENTS OF 40 CFR 63 SUBPART ZZZZ
Fire Pump Engine

	Engine Data/Subpart ZZZZ Requirements	Rule Citation
Engine Description		_
Fuel Used	Diesel	
Cl or SI	CI	
Located in an Area Source or Major Source of HAPS	Major Source	
Use (Emergency, Non-Emergency, Black-Start, Limited-Use)	Emergency	
Engine Serial Number	64Z31958	
Engine Manufacturer	CAT	-
Engine Model	3306	
Engine Power (bhp)	266	
Engine Power (kW)	198.5	
No. of Cylinders	6	_
Cylinder Displacement (I)	10.5	
Engine Manufacturer Construction Date		
Engine Installation Date	June, 2000	
Existing, New, or Reconstructed	Existing	
Compliance Date	May 3rd, 2013	Rule § 63.6595(a)(1)
	(a) Change oil and filter every 500 hrs of operation or annually, whichever first	,,,,,,
Emissions Limitations	(b) Inspect air cleaner every 1,000 hrs of operation or annually, whichever first	Rule § 63.6602, Table 2c (1
	(c) Inspect and replace (if necessary) hoses and belts every 500 hrs of operation or annually, whichever first	1 3 2,
Operating Limitations	None	Rule § 63.6603
Fuel Requirements	None	Rule § 63.6604
Initial Performance Tests	None	Rule § 63.6612(a)
Monitoring, installation, collection, operation, and	Operate and maintain according to manufacturer's instructions or develop and follow GCP	Rule § 63.6625(e)(2)
maintenance requirements	Install a non-resettable hour meter	Rule § 63.6625(f)
	Minimize idle time to <30 min	Rule § 63.6625(h)
Initial Compliance	None	Rule § 63.6630
	Non-emergency use including maintenance checks and readiness testing limited to 100 hr/yr.	
	Non-emergency use limited to 50 hr/yr.	Rule § 63.6640(f),
Continuous Compliance	No limit during emergencies	Table 6(9)
	Demonstrate compliance with work or management practices in Table 6(9)	1 4210 0(0)
Notification Requirements	Applicable notifications must be submitted	Rule § 63.6645
Reporting Requirements	None	Rule § 63.6650
Toporting Dedonctions	Copies of each notification and report to comply with the subpart	1/die 3 05.0030
	Records to demonstrate compliance with work or management practices listed in Table 6(9)	Rule § 63.6655(d)
Recordkeeping Requirements	Records to demonstrate compliance with work or management practices listed in Table 6(9) Records of maintenance conducted	Rule § 63.6655(e)(2)
	Records of operating hours	Rule § 63.6655(f)



TANKS 4.0.9d Emissions Report - Summary Format Tank Indentification and Physical Characteristics

Identification	Ider	ntific	ation
----------------	------	--------	-------

TANK A- Diesel (1,000,000 gal) User Identification:

City: State: Jacksonville Florida

Company: Type of Tank Description Vertical Fixed Roof Tank VOC emissions

Tank Dimensions
Shell Height (ft):
Diameter (ft):
Liquid Height (ft):
Avg. Liquid Height (ft):
Volume (gallons):
Timpuers: 40.00 67.00 40.00 40.00 1,000,000.00 1.00 Turnovers: Net Throughput(gal/yr): Is Tank Heated (y/n): 1,000,000.00

Ν

Paint Characteristics Shell Color/Shade: Shell Condition Roof Color/Shade: Roof Condition: White/White Good White/White Good

Cone

Roof Characteristics Type: Height (ft) Slope (ft/ft) (Cone Roof) 0.00 0.06

Breather Vent Settings Vacuum Settings (psig): Pressure Settings (psig) -0.03 0.03

Meterological Data used in Emissions Calculations: Jacksonville, Florida (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d Emissions Report - Summary Format Liquid Contents of Storage Tank

TANK A- Diesel (1,000,000 gal) - Vertical Fixed Roof Tank Jacksonville, Florida

Deily Liquid Surf. Temperature (deg F)				Liquid Bulk Temp	Bulk Temp Vapor Pressure (psia)		Vapor Liquid Vapor Mol Mass Mass Mol			Basis for Vapor Pressure			
Mixture/Component	Month	Avg	Min.	Max	(deg F)	Avg	Min	Max.	Weight.	Fract.	Fract	Weight	Calculations
Distillate fuel oil no. 2	All	69.96	64.29	75.63	68.02	0.0090	0.0076	0 0107	130.0000			188.00	Option 1: VP60 = ,0065 VP70 = ,009

TANKS 4.0.9d Emissions Report - Summary Format Individual Tank Emission Totals

Emissions Report for: Annual

TANK A- Diesel (1,000,000 gal) - Vertical Fixed Roof Tank Jacksonville, Florida

	Losses(lbs)					
Components	Working Loss	Breathing Loss	Total Emissions			
Distillate fuel oil no. 2	27.83	7.19	35.02			

ATTACHMENT BB-FI-CA1

ACID RAIN PART APPLICATION

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	.d	Renewal
11119 2001111991011 19.	INGW	L Reviseu	لكان	Kenewai

STEP 1

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

	FL	7846
Plant name_Brandy Branch	State	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	е
n	Unit ID#	SO₂ 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
	001	No	Yes		
	002	No	Yes		
	003	No	Yes		
			Yes		
		•	Yes		
			Yes		
-			Yes		
-			Yes		
			Yes		

DEP Form No. 62-210.900(1)(a) – Form Effective: 3/16/08

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,

DEP Form No. 62-210.900(1)(a) - Form

STEP 3, Continued.

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 72.7or 72.8 shall be construed as:

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

(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4 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
	,	
		_

DEP Form No. 62-210.900(1)(a) -- Form

STEP 5

For SO₂ Opt-in units only. (Not required for SO₂ Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" (and in column "f").

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

STEP 6

For SO₂ Opt-in units only.

Attach additional requirements, certify and sign.

STEP 7

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

	i	j	k	1	m	n
-	Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO ₂ Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO ₂ Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO ₂ Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO ₂ Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)
					15.45	,
-						
-						
}						
L						

- A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
- B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
- C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.

Certification (for designated representative or alternate designated representative only)

- D. Attach a complete compliance plan for SO₂ under 40 CFR 72.40.
- E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
- F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Date

•	I am authorized to make this submission on behalf of is made. I certify under penalty of law that I have per document and all its attachments. Based on my ing statements and information are to the best of my known for submitting false statements and information or or	ersorially examined, an uiry of those individua owledge and belief tru	nd am familiar with, als with primary resp ue, accurate, and co	the statements and i consibility for obtaining molete. I am aware	nformation submitted in this g the Information, I certify that the that there are significant penalties
	Name Michael Brost Owner Company Name JEA		Title Vice Pres	ident, Electric Sys	stems _.
	Phone 904-665-7547	F-mail address	brosmj@jea.com		
	Signature	\	Di Sonni (B) Ga. (O)	(-29-	13

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Signature

ATTACHMENT BB-FI-CA2

CAIR PART

Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

	This submission is: \square New	Revised Renewa	I	
STEP 1	Plant Name: Brandy Branch		State: Florida	ORIS or EIA Plant Code:
Identify the source by plant name and ORIS or EIA plant code				7846

STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

	<u>.</u>				
а	b	С	d	e	f
	Unit will hold nitrogen oxides (NO _x)	Unit will hold sulfur dioxide (SO ₂)	Unit will hold NO _X Ozone Season	New Units	New Units
	allowances in accordance	allowances in accordance	allowances in accordance	Expected Commence	Expected Monitor
	with 40 CFR	with 40 CFR	with 40 CFR	Commercial	Certification
Unit ID#	96.106(c)(1) X	96.206(c)(1) X	96.306(c)(1) X	Operation Date	Deadline
02	×	Х	×		
03	Х	X	Х	-	
					,
		,	-		

DEP Form No. 62-210.900(1)(b) -- Form

STEP 3

Read the standard requirements.

Plant Name (from STEP 1) Brandy Branch

CAIR NO_X ANNUAL TRADING PROGRAM

CAIR Part Requirements.

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

NO_x Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_X emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO_x unit shall be subject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.

 (3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

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STEP 3, Continued

Liability.

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

Effect on Other Authorities.

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

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

SO₂ Emission Requirements.

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

Excess Emissions Requirements.

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

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

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STEP 3, Continued

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.

(2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.

(2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.

(3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

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

CAIR NO. OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall:

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

NOx Ozone Season Emission Requirements.

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

(6) A CAIR NO_X Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a

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CAIR NO $_{\rm X}$ Ozone Season allowance to or from a CAIR NO $_{\rm X}$ Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO $_{\rm X}$ Ozone Season unit.

Plant Name (from STEP i) Brandy Branch

STEP 3, Continued

Excess Emissions Requirements.

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

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
- (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Ozone Season Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

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

Effect on Other Authorities.

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

STEP 4

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

Certification (for designated representative or alternate designated representative only)

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

Name Michael Brost	Title Vice President, Electric Systems
Company Owner Name JEA	
Phone 904-665-7547	E-mail Address brosmj@jea.com
Signature Signature	1-28-(3 Date

DEP Form No. 62-210.900(1)(b) - Form

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Effective: 03/11/2010

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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.				
<u>En</u>	nissions Unit Desc	ription and Status			
1.	Type of Emissions	s Unit Addressed in this	Section: (Check one)		
	single process	or production unit, or a	ion addresses, as a singl ctivity, which produces definable emission point	one or more air	
	of process or p	production units and acti	· · · · · · · · · · · · · · · · · · ·	e emissions unit, a group one definable emission	
			ion addresses, as a singl activities which produce	e emissions unit, one or fugitive emissions only.	
2.	Combustion Turbin	, ,	Simple Cycle Combustio	n Turbine	
3.	Emissions Unit Ide	entification Number: 0 0	01		
4.	Emissions Unit Status Code:	5. Commence Construction	6. Initial Startup Date:	7. Emissions Unit Major Group	
	A	Date:	4/20/2001	SIC Code:	
8.	Federal Program A	Applicability: (Check al	l that apply)		
	□ Acid Rain Unit	t			
	☐ CAIR Unit				
9.	Package Unit: Manufacturer: Ge	neral Electric	Model Number:	GE PG 7241 FA	
10.	. Generator Namepl	ate Rating: 170 MW			
11.	11. Emissions Unit Comment: Emission unit is a General Electric (GE) Model PG 7241 FA simple-cycle combustion turbine electrical generator set.				

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Emissions Unit Control Equipment/Method: Control 1 of 2

1. Control Equipment/Method Description: Low NOx Burner Technology (two – stage combustor) for natural gas firing.				
2. Control Device or Method Code: 205				
Emissions Unit Control Equipment/Method: Control 2 of 2				
Control Equipment/Method Description: Water injection used to control NOx when firing fuel oil.				
2. Control Device or Method Code: 128				
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]

EU-001 CT No. 1

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Th	aroughput Rate:
--------------------------	-----------------

2. Maximum Production Rate:

3. Maximum Heat Input Rate: 1,736 million Btu/hr (LHV) (Natural Gas firing)

1,935 million Btu/hr (LHV) (Fuel Oil firing)

4. Maximum Incineration Rate:

pounds/hr

tons/day

5. Requested Maximum Operating Schedule:

Natural Gas Firing

24 hours/day

7 days/week

52 weeks/year

4,750 hours/year

Fuel Oil (0.05% S) firing

16 hours/day

7 days/week

52 weeks/year

750 hours/year

Lower sulfur fuel oil firing

24 hours/day

7 days/week

(0.0065%)

52 weeks/year

750 hours/year

6. Operating Capacity/Schedule Comment:

The maximum heat input rates given in Permit No. 0310485-019-AV, based on the lower heating value (LHV) of each fuel at ambient conditions of 59 Degrees F, 60% relative humidity, 100% load, and 14.7 psi pressure, are as follows:

Natural Gas Firing: 1,623 MMBtu/hr Fuel Oil Firing: 1,822 MMBtu/hr

These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. The heat input rates are included in the permit only for the purposes of determining capacity during performance testing. Continuous compliance with these rates is not required. The maximum projected heat input rates are with operation at an ambient temperature of 20 degrees F and are as follows:

Natural Gas Firing @ 20 degrees F, 100% load = 1,736 (LHV) Fuel Oil Firing @ 20 degrees F, 100% load = 1,935 (LHV)

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: EU001	Plot Plan or	2. Emission Point 7	Гуре Code:	
3.	 Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Single stack CT No. 1 			for VE Tracking:	
4.	ID Numbers or Description NA	ns of Emission U	nits with this Emission	n Point in Common:	
5.	Discharge Type Code:	6. Stack Height	:	7. Exit Diameter:	
		90 feet		18 feet	
8.	Exit Temperature: 1,116°F	9. Actual Volur 2,393,300 acf	netric Flow Rate: m	10. Water Vapor: %	
11.	Maximum Dry Standard F dscfm	Flow Rate:	12. Nonstack Emission Point Height: feet		
13.	Emission Point UTM Coo Zone: 17 East (km):		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS)		
	North (km)	: 3,354.491	Longitude (DD/MM/SS)		
15.	Emission Point Comment	:			
	Exit temperature and flow gas at an ambient tempera				
	gas at an ambient tempera	iture or 33 degrees	r and operation at 10	0 /6 load.	

EMISSIONS UNIT INFORMATION Section [1]

Section [1] EU-001 CT No. 1

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

<u>50</u>	gment Description and Ra	ne: Segment 1 c)1 3		
1.	Segment Description (Process/Fuel Type): Internal simple cycle combustion engines; Electric Generation; Natural gas; Turbine				
2.	Source Classification Cod 2-01-002-01	e (SCC):	3. SCC Units:	ic Feet (MMcf)	
4.	Maximum Hourly Rate: 1.83 (approx.)	5. Maximum . 8,115 (Appr	Annual Rate: ox)	6. Estimated Annual Activity Factor:	
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 950 (LHV)	
	10. Segment Comment: Based on a nominal heat input rate of 1,736 MMBtu/hr and 4,750 hr/yr of operation. Maximum Hourly rate = 1,736 MMBtu/hr / 950 MMBtu/MMcf = 1.83 MMcf/hr Maximum Annual rate= 1,623 MMBtu/hr / 950 MMBtu/MMcf x 4,750 hr/yr = 8,115 MMcf/yr				
<u>Se</u>	Segment Description and Rate: Segment 2 of 3				
1.	 Segment Description (Process/Fuel Type): Internal combustion engines; Electric Generation; Distillate Oil (Diesel); Turbine. Simple cycle combustion turbine burning 0.05% sulfur No. 2 distillate F.O. The maximum allowable hours of fuel oil firing for Unit 1 is 750 hours per consecutive 12 month period. 				
2.	Source Classification Code 2-01-001-01	e (SCC):	3. SCC Units: Thousand G	Sallons Burned	
4.	Maximum Hourly Rate: 14.8 (approx.)	5. Maximum A 10,431 (app		6. Estimated Annual Activity Factor:	
7	Maximum % Sulfur:	8 Maximum % Ash:		9 Million Btu per SCC Unit	

0.05

10. Segment Comment:

131 (LHV)

Based on nominal heat input rate of 1,935 MMBtu/hr and 750 hr/yr of operation. Maximum Hourly rate = 1,935 MMBtu/hr / 131 MMBtu/Mgal = 14.8 Mgal/hr

Maximum Annual rate= 14.8 Mgal/hr x 750 hr/yr = 10,431 Mgal/yr

EMISSIONS UNIT INFORMATION

Section [1] EU-001 CT No. 1

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 3

 Segment Description (Process/Fuel Type): Internal simple cycle combustion engine; Electric Generation; oil fired; Turbine. Simple cycle combustion turbine burning 0.0065% sulfur (by wt.) F.O. The maximum allowable hours of fuel oil firing for Unit 1 is 750 hours per consecutive 12 month period. 					
2. Source Classificati 2-01-002-01	on Code (SCC	C):	3. SCC Units Thousand		ns Burned
4. Maximum Hourly 14.8 (approx.)		Maximum Ai 0,431 (Appro		6.	Estimated Annual Activity Factor:
7. Maximum % Sulfi 0.0065	ır: 8. N	Maximum %	Ash:	9.	Million Btu per SCC Unit: 131 (LHV)
Based on nominal Maximum Hourly ra	10. Segment Comment: Based on nominal heat input rate of 1,935 MMBtu/hr and 750 hr/yr of operation. Maximum Hourly rate = 1,935 MMBtu/hr / 131 MMBtu/Mgal = 14.8 Mgal/hr Maximum Annual rate= 14.8 Mgal/hr x 750 hr/yr = 10,431 Mgal/yr				
Segment Description	and Rate: Se	egment	_ of		
1. Segment Description (Process/Fuel Type):					
2. Source Classificati	2. Source Classification Code (SCC): 3. SCC Units:				
4. Maximum Hourly	Rate: 5. M	laximum A	nnual Rate:	6.	Estimated Annual Activity Factor:
7. Maximum % Sulfi	r: 8. M	8. Maximum % Ash: 9. Million Btu per SCC Ur		Million Btu per SCC Unit:	
10. Segment Commen	::			-	

DEP Form No. 62-210.900(1) Effective: 03/11/2010

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1	D-11-44 D-144 1	2 P	2 010- 1	4. D-11
1.	Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant
		Device Code	Device Code	Regulatory Code
	NOX	205	028	EL
	СО			EL
	SO2			WP
	VOC			NS
	PM			EL
	PM10			NS

POLLUTANT DETAIL INFORMATION
Page [1] of [5]
NOX

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

Totelliai, Estimated Tugitive, and Dasenne te Trojected Actual Emissions				
1. Pollutant Emitted: 2. Total Percent NOX				
3. Potential Emissions:		4. Synth	netically Limited?	
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	tons/year	⊠ Y	es 🗌 No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year				
6. Emission Factor: 10.5 ppmvd @ 15% O2 (No. 42 ppmvd @ 15% O2 (Oil)	G)		7. Emissions Method Code:	
Reference: Permit No. 0310485-001-AC			U	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:	
tons/year	From:	T	o:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:	
tons/year	☐ 5 years ☐ 10 years			
10. Calculation of Emissions:				
Hourly NOx emission rates for simple cycle operation: Natural gas = 69.3 lb/hr (@ iso conditions) on a 24-hr block average basis Fuel oil = 338 lb/hr (@20F) Potential Annual Emissions: Natural gas = 69.3 lb/hr Fuel oil = 318 lb/hr (@59 F) This emission unit is permitted to operate up to 4,750 hours per year including up to 750 hours a year when firing fuel oil.				
Annual emissions = [(69.3 lb/hr)x(4000 hr/yr) + (318 lb/hr) x (750 hr/yr)] / (2,000 lb/ton) = 257.85 ton/yr				
11. Potential, Fugitive, and Actual Emissions Comment: The hourly NOx emissions rate with operation on natural gas is from Permit No. 0310485-019-AV and is based on a 24-hr block average as measured by CEMS. The hourly emissions rate with fuel oil firing are based on 42 ppmvd @ 15 % O ₂ on a 3-hour average and are given for informational purposes only and do not constitute limits. The annual potential emissions are given for informational purposes only and do not constitute limits.				

POLLUTANT DETAIL INFORMATION
Page [1] of [5]

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 1 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date Emissions:	of Allowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable	
	10.5 ppmvd @ 15% O2		69.3 lb/hour	164.4 tons/year
5.	Method of Compliance: Annual stack test			
6.	6. Allowable Emissions Comment (Description of Operating Method): Requirement of Permit No. 0310485-019-AV. NOx calculated as NO2 (@ISO conditions). The pound per hour and ton per year equivalent emission rates are provided for informational purposes only and do not constitute limits.			

Allowable Emissions 2 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 69.3 lb/hr (@iso conditions) 24 hr block average while firing natural gas	4.	Equivalent Allowable Emissions: 69.3 lb/hour 164.6 tons/year
5.	Method of Compliance:	•	
6.	Allowable Emissions Comment (Description Requirement of Permit No. 0310485-019-AV.	of (Operating Method):

Allowable Emissions Allowable Emissions 3 of 4

1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units: 42 ppmvd@15%O2 while firing fuel oil	4. Equivalent Allowable Emissions: 338 lb/hour 119.3 tons/year	
5.	5. Method of Compliance: Demonstrated by CEMS on 3-hr average basis. Demonstrated by stack test with NOx emissions calculated as NO2 (@ISO conditions).		
6.	6. Allowable Emissions Comment (Description of Operating Method): Requirement of Permit No. 0310485-019-AV. The pound per hour and ton per year equivalent emission rates are provided for informational purposes only and do not		

constitute limits.

POLLUTANT DETAIL INFORMATION
Page [1] of [5]
NOX

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 4 of 4

1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 75 ppmvd @ 15% O2	4.	Equivalent Allowable Emissions: 69.3 lb/hour 164.4 tons/year
5.	Method of Compliance: CEMS	•	
6.	Allowable Emissions Comment (Description	of (Operating Method):
Al	lowable Emissions Allowable Emissions	c	of
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of (Operating Method):
<u>All</u>	owable Emissions Allowable Emissions	0	f
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of (Operating Method):

POLLUTANT DETAIL INFORMATION
Page [2] of [5]

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:	_		ency of Control:		
CO					
3. Potential Emissions:		_	netically Limited?		
65 lb/hour 120.38	tons/year	⊠ Y	es No		
5. Range of Estimated Fugitive Emissions (as a	applicable):				
to tons/year					
6. Emission Factor: 15 ppmvd (NG) 20 ppmvd (Oil)			7. Emissions Method Code:		
Reference: Permit No. 0310485-001-AC			0		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:		
tons/year	From:	T	o:		
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:		
tons/year		rs 🔲 10	0 years		
10. Calculation of Emissions: Hourly emissions for natural gas firing limited to 48.0 lb/hr (@ISO conditions) Hourly emissions for fuel oil firing limited to 65 lb/hr (@ISO conditions) The emissions unit is permitted to operate up to 4,750 hours per year of total operation of which 750 hours can be firing fuel oil.					
Potential annual: (48 lb/hr x 4000 hr/yr + 65 lb/hr x 750 hr/yr) x ton/2,000 lb = 120.38 TPY					
11. Potential, Fugitive, and Actual Emissions Comment: The hourly CO emission rates are from permit No. 0310485-019-AV. The annual potential emission rate is provided for informational purposes only and does not constitute a limit.					

POLLUTANT DETAIL INFORMATION Page [2] of [5]

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 1 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of All Emissions:	owable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emiss	sions:
	15.0 ppmvd while firing natural gas	<u> </u>	lb/hour	tons/year
5.	Method of Compliance: EPA test Method 10			
6.	Allowable Emissions Comment (Description Requirements of Permit No. 0310485-019-AV. can also be done during NOx RATAs.			Testing

Allowable Emissions 2 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 48 lb/hr (@ ISO conditions) while firing natural gas.	4.	Equivalent Allowable Emissions: 48.0 lb/hour 114.0 tons/year
5.	Method of Compliance: EPA Test Method 10		
6.	Allowable Emissions Comment (Description of Operating Method): Permit No. 0310485-019-AV. Applies when firing natural gas. The ton per year equivalent emissions rate is given for informational purposes only and does not constitute a limit. Equivalent annual emissions = 48 lb/hr x 4,750 hr/yr x ton/2,000 lb = 114 TPY.		

Allowable Emissions 3 of 4

1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 20 ppmvd while firing fuel oil	4. Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: EPA Test Method 10	
6.	Allowable Emissions Comment (Description Requirement of Permit No. 0310485-019-AV. Also be done during the NOx RATAs.	of Operating Method): Applies when firing fuel oil. Testing can

POLLUTANT DETAIL INFORMATION Page [2] of [5]

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 -	4 of	4
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1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 65 lb/hr (@ISO Conditions) when firing fuel oil	4.	Equivalent Allowable Emissions: 65 lb/hour 24.4 tons/year		
5.	Method of Compliance: EPA Test Method 10				
6.	Allowable Emissions Comment (Description Permit No. 0310485-016-AV. Applies when femissions rate is given for informational pur Equivalent annual emissions = 65 lb/hr x 750	firing pos	fuel oil. The ton per year equivalent es only and does not constitute a limit.		
Al	lowable Emissions Allowable Emissions	c	of		
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year		
5.	Method of Compliance:				
6.	6. Allowable Emissions Comment (Description of Operating Method):				
Al	lowable Emissions Allowable Emissions	c	f		
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year		
5.	Method of Compliance:				
6.	Allowable Emissions Comment (Description	of (Operating Method):		

POLLUTANT DETAIL INFORMATION
Page [3] of [5]
VOC

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 otential, Estimated Fugitive, and Dasenne & Frojected Actual Emissions						
Pollutant Emitted: VOC	2. Total Perc	ent Efficie	ency of Control:			
3. Potential Emissions:		4. Synth	netically Limited?			
1	3 tons/year	⊠ Y	es 🗌 No			
5. Range of Estimated Fugitive Emissions (as:						
to tons/year	шррпоцого).					
6. Emission Factor: 3.5 ppmvd (NG)			7. Emissions			
4.0 ppmvd (Oil)			Method Code:			
Reference: Permit No. 0310485-001-AC			0			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:			
tons/year	From:	T	0:			
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:			
tons/year	☐ 5 yea	rs 🔲 10) years			
10. Calculation of Emissions:			-			
Hourly VOC emission rates at ISO conditions (59°F) for simple cycle operation: Natural gas = 4.0 lb/hr Fuel Oil = 7.5 lb/hr This emission unit is permitted to operate up to 4,750 hours of total operation and 750 hours per year when firing fuel oil. Maximum potential emission rate with 4,000 hours per year of operation on natural gas and 750 hours per year off operation on fuel oil.						
Potential annual emissions = [(4 lb/hr x 4,000 hr/yr) + (7.5 lb/hr x 750 hr/yr)] / 2,000 lb/ton = 10.8 TPY						
11. Potential, Fugitive, and Actual Emissions Comment: Annual potential emission calculations are based on operation at 100% load and 59°F ambient temperature. The potential annual emission rates shown in fields 3 and 10 are for informational purposes only and do not constitute limits.						

POLLUTANT DETAIL INFORMATION
Page [3] of [5]

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
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1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 2 ppmvd while firing natural gas	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: The CO limit shall be employed as a surrogate	e an	d no annual VOC testing is required.
6.	Allowable Emissions Comment (Description Permit No. 0310485-019-AV .	of (Operating Method):

Allowable Emissions 2 of 4

1.	Basis for Allowable Emissions Code: OTHER 2. Future Effective Date of Allowable Emissions:				
3.	Allowable Emissions and Units: 3.5 ppmvd while firing fuel oil	Equivalent Allowab	le Emissions: tons/year		
5.	Method of Compliance: The CO limit shall be employed as a surrogate and no annual VOC testing is required.				
6.	Allowable Emissions Comment (Description The ton per year equivalent emission rate is does not constitute a limit.		ourposes only and		

Allowable Emissions 3 of 4

1.	 Basis for Allowable Emissions Code: OTHER Emissions: 					
3.	Allowable Emissions and Units: 4 lb/hr (@ ISO conditions) when firing NG	4.	Equivalent Allowable Emission 4 lb/hour 9.5 to	ons: ons/year		
5.	Method of Compliance: The CO limit shall be employed as a surrogate and no annual VOC testing is required.					
6.	6. Allowable Emissions Comment (Description of Operating Method): The ton per year equivalent emission rate is given for informational purposes only and does not constitute a limit. Equivalent annual emissions = 4 lb/hr x 4,750 hr/yr x ton/2,000 lb = 9.5 TPY.			only and		

POLLUTANT DETAIL INFORMATION Page [3] of [5] VOC

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 Emission	ıs	Allowable Emissions 4 of	4

<u>Al</u>	lowable Emissions Allowable Emissions 4 or	† <u>4</u>								
1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:								
3.	Allowable Emissions and Units: 7.5 lb/hr (@ ISO conditions) when firing oil	4.	Equivalent Allowable Emissions: 7.5 lb/hour 2.8 tons/year							
5.	Method of Compliance: The CO limit shall be employed as a surrogate and no annual VOC testing is required.									
6.	6. Allowable Emissions Comment (Description of Operating Method): Equivalent annual emissions = 7.5 lb/hr x 750 hr/yr x ton/2,000 lb = 2.8 TPY.									
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: Ib/hour tons/year							
5.	Method of Compliance:									
6. Allowable Emissions Comment (Description of Operating Method):										
Al	lowable Emissions Allowable Emissions	o:	f							
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:							
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: Ib/hour tons/year							
5.	Method of Compliance:									
6.	Allowable Emissions Comment (Description	of C	perating Method):							

POLLUTANT DETAIL INFORMATION
Page [4] of [5]
SO2

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

rotential, Estimated Fugitive, and Dasenne o		·							
1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:								
3. Potential Emissions:		4. Synth	hetically Limited?						
	tons/year	r Yes 🗍 No							
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year									
6. Emission Factor: 0.05% sulfur oil / 2 grains/	100 scf gas	_	7. Emissions						
Reference: 0310485-019-AC			Method Code: 0						
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:								
tons/year	From: To:								
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:								
tons/year	☐ 5 years ☐ 10 years								
10. Calculation of Emissions: Hourly SO2 emissions rates for simple cycle operation: Natural gas = 11.4 lb/hr @ 20F and 10.7 lb/hr @ 59F (2 gr sulfur/100 scf) Fuel Oil (0.05% sulfur) = 104.3 lb/hr @ 20F and 98.21 lb/hr @59F Lower sulfur fuel oil (0.0065%) = 13.56 lb/hr @20F and 12.77 lb/hr @59F Potential Annual Emissions: This emission unit is permitted to operate up to 4,750 hours per year of total operation and 750 hours per year when firing fuel oil. Under this scenario, worst case annual SO2 emissions are with 4,000 hours of operation firing natural gas and 750 hours per year of operation on 0.05% sulfur fuel oil. Annual emissions = [(10.7 lb/hr x 4,000 hr/yr) + (98.21 lb/hr) x (750 hr/yr)]/2,000 lb/ton = 58.23 ton/yr									

POLLUTANT DETAIL INFORMATION
Page [4] of [5]
SO2

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 1 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Emissions:	f Allowable
3.	Allowable Emissions and Units: Firing of natural gas with 2 gr S/100 scf gas.	4.	Equivalent Allowable E	
	Firmg of natural gas with 2 gr 5/100 scr gas.		11.4 lb/hour	25.4 tons/year
5.	Method of Compliance:			
	Fuel specification			
6.	Allowable Emissions Comment (Description	of (Operating Method):	
	Equivalent annual emissions = 11.4 lb/hr x 4,000 hr/yr x ton/2,000 lb = 25.4 TPY. The lb/hr and TPY equivalent emission rates are for information purposes only and do not constitute limits.			

Allowable Emissions 2 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: Firing of fuel oil with 0.05% S	4.	Equivalent Allowable Emissions: 104.3 lb/hour 36.8 tons/year
5.	Method of Compliance: Fuel specification		
6.	 Allowable Emissions Comment (Description of Operating Method): Equivalent annual emissions = 104.3 lb/hr x 750 hr/yr x ton/2,000 lb = 36.8 TPY. The lb/hr and TPY equivalent emission rates are for information purposes only and do not constitute limits. 		

Allowable Emissions 3 of 4

1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.0065% sulfur, by weight in the fuel oil	4. Equivalent Allowable Emissions: 13.6 lb/hour 4.8 tons/year
5.	Method of Compliance: Fuel Specification	
6.	6. Allowable Emissions Comment (Description of Operating Method): Equivalent annual emissions = 13.6 lb/hr x 750 hr/yr x ton/2,000 lb = 4.8 TPY. The lb/hr and TPY equivalent emission rates are for information purposes only and do not constitute limits.	

POLLUTANT DETAIL INFORMATION
Page [4] of [5]

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	4 01	f 4
---------------------	-----------	------------------	------	------------

1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.8% sulfur, by weight, in the fuel oil	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: Fuel Analysis		
6.	Allowable Emissions Comment (Description Rule NSPS 40 CFR 60.334 (b) of Subpart GG Gas Turbines. The Ib/hr and TPY equivapurposes only and do not constitute limits.	- St	andards of Performance for Stationary
All	owable Emissions Allowable Emissions	0	f
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of (Operating Method):
<u>All</u>	owable Emissions Allowable Emissions	0	f
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of (Operating Method):

POLLUTANT DETAIL INFORMATION
Page [5] of [5]
PM/PM10

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 Perc	ent Efficie	ency of Control:
3. Potential Emissions: 17 lb/hour 24.	4 tons/year	4. Syntl ⊠ Y	hetically Limited? es
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 9 lb/hr (NG) 17 lb/hr (Oil)			7. Emissions Method Code:
Reference: Permit No. 0310485-001-AC			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:
tons/year	From:	T	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	d Monitori	ng Period:
tons/year	☐ 5 yea	rs 🔲 1	0 years
10. Calculation of Emissions: Hourly PM emission rates for simple cycle operation: Natural Gas = 9 lb/hr Fuel Oil = 17 lb/hr Potential Annual Emissions: [(9 lb/hr x 4,000 hr/yr) + (17 lb/hr) x (750 hr/yr)] / 2,000 lb/ton = 24.4 tons/yr			

POLLUTANT DETAIL INFORMATION Page [5] of [5] PM/PM10

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
---------------------	-----------	------------------	---	----	---

AI	lowable Emissions Allowable Emissions 1 o	[<u>Z</u>		
1.	Basis for Allowable Emissions Code: OTHER	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 9.0 lb/hr (front half catch only) while firing natural gas	4. Equivalent Allowable Emissions: 9.0 lb/hour 21.4 tons/year		
5.	Method of Compliance: Use of pipeline natural gas as indicated by open	pacity		
6.	Allowable Emissions Comment (Description of Operating Method): Equivalent annual emissions = 9.0 lb/hr x 4,750 hr/yr x ton/2,000 lb = 21.4 TPY The ton per year equivalent allowable emission rate is provided for informational purposes only and does not constitute a limit.			
<u>A</u>]	lowable Emissions Allowable Emissions 2 o	f <u>2</u>		
1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 17.0 lb/hr (front half catch only) while firing fuel oil	4. Equivalent Allowable Emissions: 17.0 lb/hour 6.4 tons/year		
5.	Method of Compliance: Use of low (0.05% sulfur) or very low sulfur opacity.	r (0.0065% sulfur) fuel oil as indicated by		
6.	6. Allowable Emissions Comment (Description of Operating Method): Equivalent annual emissions = 17.0 lb/hr x 750 hr/yr x ton/2,000 lb = 6.4 TPY. The ton per year equivalent allowable emission rate is given for informational purposes only and does not constitute a limit.			
<u>A</u>]	lowable Emissions Allowable Emissions	of		
1.	Basis for Allowable Emissions Code:	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year		
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description	of Operating Method):		

G. VISIBLE EMISSIONS INFORMATION

Complete 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

	VISION EMILES	ons Emmation 1 or 2	
1.	Visible Emissions Subtype: VE10	2. Basis for Allowable ☐ Rule	Opacity: Other
3.	Allowable Opacity:		
	• •	ceptional Conditions:	%
	Maximum Period of Excess Opacity Allowe	•	min/hour
1	Method of Compliance: EPA Method 9		_
4.	Method of Comphance. EPA Method 9		
		_	
5.	Visible Emissions Comment:		
	BACT Requirement.		
	Permit Nos. 0310485-001-AC and 0310485-01	9-AV.	
		T	
<u>Vis</u>	sible Emissions Limitation: Visible Emissi	ons Limitation 2 of 2	
1.	Visible Emissions Subtype:	2. Basis for Allowable	Opacity:
	VE99	□ Rule	☐ Other
3.	Allowable Opacity:	_	
	* •	ceptional Conditions:	100 %
	Maximum Period of Excess Opacity Allowe	-	2 hr/24 hr min/hour
1	Method of Compliance: None		
4.	Method of Comphance. None		
5.	Visible Emissions Comment:		
	Rule 62-210.700(1), F.A.C., allows for 2 hours	(120 minutes) per 24 ho	urs for startup.

EMISSIONS UNIT INFORMATION

Section [1] EU-001 CT No. 1

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 2

1.	Parameter Code: EM	2.	Pollutant(s): NOX
3.	CMS Requirement:		Rule
4.	Monitor Information Manufacturer: TECO		
	Model Number: 42CHL		Serial Number: 42C-67847-358
5.	Installation Date: 05/28/2001	6.	Performance Specification Test Date: 5/28/2001
7.	Continuous Monitor Comment: 40 CFR 75 requirement.		
<u>Co</u>	ntinuous Monitoring System: Continuous	Moi	nitor <u>2</u> of <u>2</u>
1.	Parameter Code: 02	2.	Pollutant(s):
3.	CMS Requirement:	\boxtimes	Rule
4.	Monitor Information Manufacturer: Servomex		
	Model Number: 1440C		Serial Number: 1519
5.	Installation Date: 05/28/2001	6.	Performance Specification Test Date: 05/28/2001
7.	Continuous Monitor Comment: 40 CFR 75 requirement.		

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

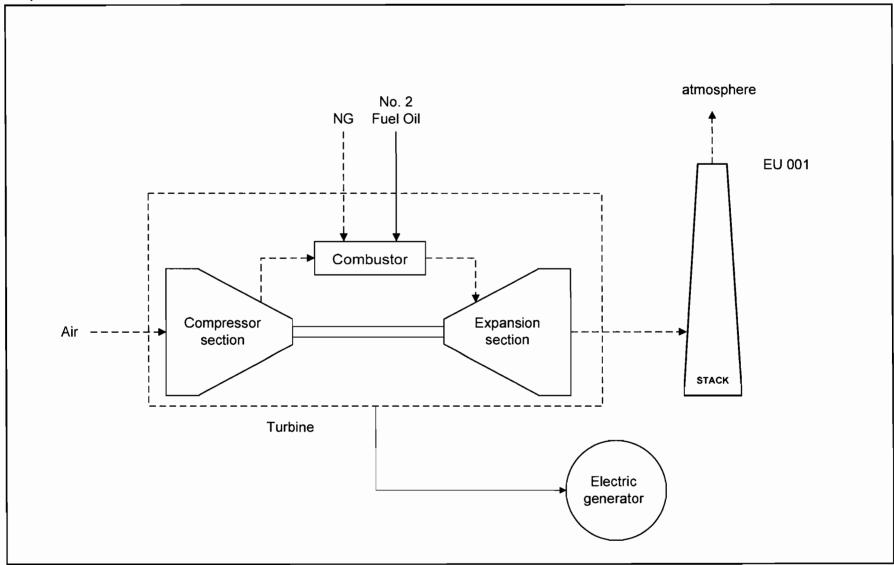
1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☑ Attached, Document ID: BB-EU1-I1 ☐ Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-EU1-12 Previously Submitted, Date
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-EU1-14 Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-EU1-15 Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	□ Previously Submitted, Date: July 12, 2012
	Test Date(s)/Pollutant(s) Tested: CO, NOx, VE
	☐ To be Submitted, Date (if known):
	Test Date(s)/Pollutant(s) Tested:
	□ Not Applicable
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: Attached, Document ID: Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

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)):	
	☐ Attached, Document ID:	☐ Not Applicable
2.	Good Engineering Practice Stack Height A	nalysis (Rules 62-212.400(4)(d) and 62-
	212.500(4)(f), F.A.C.):	
	☐ Attached, Document ID:	☐ Not Applicable
3.	Description of Stack Sampling Facilities: only)	(Required for proposed new stack sampling facilities
	Attached, Document ID:	☐ Not Applicable
Ad	Iditional Requirements for Title V Air Or	peration Permit Applications
1.	Identification of Applicable Requirements:	
2.	Compliance Assurance Monitoring: Attached, Document ID:	Not Applicable
3.	Alternative Methods of Operation: ☑ Attached, Document ID: BB-EU1-IV3	☐ Not Applicable
4.	Alternative Modes of Operation (Emission	s Trading):
	Attached, Document ID:	☑ Not Applicable
Ad	Iditional Requirements Comment	
		

DEP Form No. 62-210.900(1) Effective: 03/11/2010 ATTACHMENT BB-EU1-I1
PROCESS FLOW DIAGRAM



Attachment BB-EU1-I1
Process Flow Diagram
Brandy Branch Generating Station
Simple-Cycle Combustion Turbines-Electrical
Generator (EU 001)

Process Flow Legend
Solid/Liquid →
Gas ----→



ATTACHMENT BB-EU1-12
FUEL ANALYSIS

EA / JACKSONVILLE ELECTRIC AUTHORITY P.O. BOX 4910 32201-4910 JACKSONVILLE FL Inited States

FAST TO THE POINT. AST 10 THE POINT.
SAYBOLT LP
2610 S. Federal Hwy
PLauderdale, Plorida
33316
Phone: (954)524-8772
Fax: (954)524-2377
E-mait: Saybolt:Nauderdale@corelab.com
Handfed by, Armando Mojia

CERTIFICATE OF ANALYSIS

Report no.

13062/3128B.01.I/12

Report date

02/Jan/2013

Object

JEA QUARTERLY INVENTORY

Product

#2 Diesel

ocation

Jacksonville, FL, Brandy Branch

Dutturn Date

31/Dec/2012

Sample submitted as

#2 Diesel

Received

Sampled by Saybolt Inspector

Marked Date of sampling Tank#2

Testing completed Sealed

ab number

31/Dec/2012 10/Jan/2013

Open 1485

Test	Analyte	Unit	Method	Specification	Result	
					Prefix Figure	
API Gravity at 60°F	API Gravity	API	ASTM D 287	Report	35.5	
Heat of Combustion	Heat of Combustion	BTU/Gal	ASTM D 240	Report	138687	
Sulfur X-Ray	Sulfur total	mg/kg	ASTM D 2622	Report	26	
Ash	Ash	m/m%	ASTM D 482	Report	0.001	
Nitrogen	Nitrogen	mg/kg	ASTM D 5762	Report	9	
Bacterial Growth	Bacterial Growth	Count/ml	LiquidCult	Report	< 100	
Fungal Growth	Fungal growth	Count/ml	LiquidCult	Report	< 10	

Time

Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (except for analysis of RFG), IP367 and appendix E of IP standard methods for analysis and testing with respect to the utilization of test data to determine conformance with specifications.

This report is issued in accordance with the General Terms and Conditions of Saybolt Jacksonville, FL and the recipient is deemed to have full knowledge thereof.

Remarks

Drundousfeio Asmando Mejia

JEA / JACKSONVILLE ELECTRIC AUTHORITY P.O. BOX 4910 32201-4910 JACKSONVILLE FL United States

A COUR LABOR

FAST TO THE PODET. SAYBOLT LP 2610 S. Federal Hwy Ft Lauderdale, Florida 33316 33316 Phone: (954)524-8772 Fax: (954)524-2377 E-mail: Saybolt.flauderdate@corelab.com Handlod by: Armando Mejia

CERTIFICATE OF ANALYSIS

Report no.

13062/3128B.01.I/12

Report date

02/Jan/2013

Object

JEA QUARTERLY INVENTORY

Product

Location

Received

#2 Diesel

Jacksonville, FL, Brandy Branch

Outtum Date

31/Dec/2012

Sample submitted as

#2 Diesel

Sampled by Saybolt Inspector

Marked

Tank# 1 31/Dec/2012

Date of sampling

Testing completed

10/Jan/2013

Time

Sealed Lab number Open 1484

Test	Analyte	Unit M	Method	Specification	Result	
					Prefix Figure	
API Gravity at 60°F	API Gravity	API	ASTM D 287	Report	35.3	
Heat of Combustion	Heat of Combustion	BTU/Gal	ASTM D 240	Report	139148	
Sulfur X-Ray	Sulfur total	mg/kg	ASTM D.2622	Report	17	
Ash	Ash	m/m%	ASTM D 482	Report	0.002	
Nitrogen	Nitrogen	mg/kg	ASTM D 5762	Report	5	
Bacterial Growth	Bacterial Growth	Count/ml	LiquidCult	Report	< 100	
Fungal Growth	Fungal growth	Count/ml	LiquidCult	Report	< 10	
					_	

Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (except for analysis of RFG), IP367 and appendix E of IP standard methods for analysis and testing with respect to the utilization of test data to determine conformance with specifications.

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Remarks

Asmolowy Ejio

Florida Gas Transr	mission-8001		Mar 13 2013 11:47	7 AM										
Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	Wobbe	CHDP
3/12/2013	1015	1.222	0.344	0.579	96.71	1.45	0.167	0.033	0.035	0.013	0.009	0.018	1335	-21
3/11/2013	1015	1.181	0.344	0.578	96.811	1.395	0.162	0.033	0.034	0.013	0.008	0.019	1335	-21
3/10/2013	1014	1.222	0.354	0.578	96.839	1.33	0.152	0.032	0.032	0.013	0.008	0.019	1334	-21
3/8/2013	1013	1.269	0.358	0.578	96.772	1.348	0.148	0.032	0.032	0.013	0.009	0.02	1332	-20
3/7/2013	1014	1.267	0.353	0.579	96.745	1.38	0.151	0.032	0.032	0.013	0.009	0.019	1333	-20
3/6/2013	1014	1.268	0.358	0.579	96.668	1.441	0.159	0.033	0.033	0.013	0.008	0.018	1333	-22
3/5/2013	1014	1.267	0.367	0.579	96.635	1.461	0.163	0.033	0.034	0.013	0.008	0.019	1333	-21
3/4/2013	1015	1.277	0.367	0.579	96.58	1.506	0.163	0.033	0.034	0.013	0.008	0.018	1333	-22
3/3/2013	1014	1.29	0.37	0.579	96.588	1.491	0.16	0.031	0.032	0.013	0.008	0.016	1332	-24
3/2/2013	1016	1.258	0.372	0.58	96.543	1.53	0.18	0.037	0.037	0.015	0.009	0.019	1334	-20
3/1/2013	1015	1.235	0.357	0.579	96.678	1.45	0.167	0.036	0.035	0.014	0.009	0.019	1334	-21
2/28/2013	1015	1.27	0.371	0.58	96.54	1.533	0.173	0.036	0.035	0.014	0.008	0.018	1333	-21
2/27/2013	1016	1.238	0.359	0.579	96.587	1.524	0.176	0.037	0.037	0.015	0.009	0.019	1334	-20
2/26/2013	1016	1.222	0.354	0.579	96.603	1.521	0.181	0.038	0.038	0.015	0.009	0.019	1335	-20
2/25/2013	1016	1.215	0.359	0.579	96.638	1.499	0.176	0.037	0.036	0.014	0.009	0.018	1335	· -21
2/24/2013	1016	1.204	0.359	0.579	96.622	1.534	0.171	0.036	0.035	0.014	0.008	0.017	1335	-23
2/23/2013	1015	1.252	0.365	0.579	96.598	1.516	0.164	0.034	0.033	0.013	0.008	0.017	1334	-23
2/22/2013	1015	1.241	0.361	0.579	96.585	1.551	0.163	0.032	0.032	0.012	0.007	0.017	1334	-23
2/21/2013	1016	1.27	0.354	0.58	96.508	1.588	0.173	0.034	0.035	0.013	0.008	0.017	1334	-23
2/20/2013	1016	1.246	0.356	0.58	96.518	1.586	0.18	0.037	0.037	0.014	0.009	0.018	1334	-22
2/19/2013	1015	1.237	0.359	0.579	96.598	1.525	0.172	0.035	0.035	0.013	0.008	0.018	1334	-22
2/18/2013	1016	1.211	0.366	0.579	96.564	1.585	0.171	0.033	0.034	0.013	0.008	0.016	1335	-24
2/17/2013	1016	1.232	0.359	0.579	96.573	1.547	0.178	0.036	0.036	0.014	0.009	0.017	1335	-23
2/16/2013	1014	1.252	0.352	0.579	96.716	1.428	0.152	0.032	0.031	0.013	0.008	0.016	1333	-25
2/15/2013	1014	1.254	0.345	0.579	96.677	1.477	0.151	0.031	0.03	0.012	0.007	0.016	1333	-25
2/14/2013	1014	1.261	0.344	0.579	96.709	1.433	0.153	0.032	0.031	0.012	0.008	0.017	1333	-24
2/13/2013	1015	1.233	0.32	0.579	96.738	1.436	0.164	0.035	0.034	0.013	0.008	0.018	1335	-21
2/12/2013	1016	1.217	0.322	0.579	96.714	1.461	0.169	0.037	0.036	0.014	0.009	0.02	1335	-19
2/11/2013	1016	1.22	0.326	0.579	96.633	1.532	0.174	0.037	0.036	0.014	0.009	0.019	1335	-20
2/10/2013	1017	1.22	0.322	0.579	96.598	1.568	0.178	0.037	0.036	0.014	0.009	0.019	1336	-21
2/9/2013	1015	1.244	0.32	0.579	96.749	1.412	0.163	0.035	0.035	0.014	0.009	0.019	1334	-20
2/8/2013	1016	1.182	0.327	0.579	96.727	1.469	0.172	0.038	0.038	0.016	0.01	0.022	1336	-17
2/7/2013	1015	1.229	0.31	0.579	96.745	1.436	0.168	0.036	0.036	0.014	0.009	0.017	1335	-22
2/6/2013	1013	1.261	0.327	0.578	96.792	1.391	0.143	0.027	0.028	0.011	0.007	0.014	1333	-27
2/5/2013	1014	1.296		0.579	96.647	1.458	0.166	0.032	0.033	0.012	0.008	0.016	1333	-24
2/4/2013	1013	1.286		0.578	96.769	1.385	0.145	0.027	0.028	0.011	0.007	0.014	1332	-27
2/3/2013	1013	1.268	0.327	0.578	96.879	1.303	0.137	0.027	0.027	0.011	0.007	0.015	1332	-27
2/2/2013 2/1/2013	1015	1.212	0.322	0.578	96.787	1.415	0.161	0.034	0.032	0.013	0.008	0.016	1335	-24
1/31/2013	1015 1015	1.255 1.324	0.32 0.348	0.579	96.71	1.451	0.161	0.033	0.032	0.013	0.008	0.017	1334	-23
1/30/2013	1013	1.264	0.356	0.58 0.58	96.505 96.447	1.544 1.615	0.17 0.192	0.035 0.04	0.034 0.039	0.014	0.008	0.018	1332 1334	-22
1/29/2013	1017	1.253	0.356	0.581	96.316	1.719		0.044	0.039	0.016	0.01	0.021	1334	-17
1/28/2013	1018	1.223	0.36	0.581	96,419	1.719	0.216 0.221	0.044	0.044	0.017 0.019	0.011 0.012	0.023 0.024	1336	-15 -14
1/27/2013	1018	1.199		0.58	96.563	1.529	0.221	0.047	0.047	0.019	0.012	0.024	1336	-14 -16
1/26/2013	1017	1.191	0.345	0.579	96.652	1.483	0.197	0.042	0.042	0.018	0.011	0.022	1336	-17
1/25/2013	1018	1.21	0.346	0.58	96.508	1.585	0.211	0.045	0.044	0.018	0.011	0.022	1336	-16
1/24/2013	1016	1.241	0.352	0.58	96.58	1.535	0.176	0.038	0.036	0.015	0.009	0.02	1334	-19
1/23/2013	1015	1.247	0.347	0.579	96.62	1.5	0.171	0.037	0.035	0.015	0.009	0.02	1334	-19
1/22/2013	1016	1.253	0.34	0.58	96.541	1.568	0.18	0.038	0.037	0.015	0.009	0.019	1335	-20
		,,,												0

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the information This information is provided on a best efforts basis

Stream History

	Brooker 24" Stream				
Gas Day	Sulfur Avg ppm	Avg Grains/hcf			
03/12/2013	1.566	0.098			
03/11/2013	1.738	0.109			
03/10/2013	1,744	0.109			
03/09/2013	1.536	0.096			
03/08/2013	1.450	0.091			
03/07/2013	1.225	0.077			
03/06/2013	1.026	0.064			
03/05/2013	1.830	0.114			
03/04/2013	1.632	0.102			
03/03/2013	1.001	0.063			
03/02/2013	0.909	0.057			
03/01/2013	1.145	0.072			
02/28/2013	1.511	0.094			
02/27/2013	1.740	0.109			
02/26/2013	2.107	0.132			
02/25/2013	2.163	0.135			
02/24/2013	2.326	0.145			
02/23/2013	2.452	0.153			
02/22/2013	2.365	0.148			
02/21/2013	1.905	0.119			
02/20/2013	1.593	0.100			
02/19/2013	2.205	0.138			
02/18/2013	1.239	0.077			
02/17/2013	0.749	0.047			
02/16/2013	0.883	0.055			
02/15/2013	1.598	0.100			
02/14/2013	0.924	0.058			
02/13/2013	0.028	0.002			
02/12/2013	0.305	0.019			
02/11/2013	3.500	0.219			
02/10/2013	2.444	0.153			
02/09/2013	2.139	0.134			
02/08/2013	2.529	0.158			
02/07/2013	2.950	0.184			
02/06/2013	2.552	0.159			
02/05/2013	2.058	0.129			
02/04/2013	1.778	0.111			
02/03/2013	1.926	0.120			
02/02/2013	1.904	0.119			
02/01/2013	1.494	0.093			
01/31/2013	1.419	0.089			
01/30/2013	2.409	0.151			
01/29/2013	2.583	0.161			
01/28/2013	2.584	0.162			
01/27/2013	3.174	0.198			
01/26/2013	3.352	0.209			
01/25/2013	3.384	0.212			

	Brooker 24" Stream				
	Sulfur				
Gas Day	Avg ppm	Avg Grains/hcf			
01/24/2013	4.493	0.281			
01/23/2013	2.906	0.182			
01/22/2013	2.777	0.174			
01/21/2013	3.607	0.225			
01/20/2013	3.933	0.246			
01/19/2013	3.452	0.216			
01/18/2013	2.886	0.180			
01/17/2013	2.941	0.184			
01/16/2013	4.107	0.257			
01/15/2013	4.244	0.265			
01/14/2013	4.373	0.273			
01/13/2013	4.471	0.279			
01/12/2013	4.515	0.282			
01/11/2013	4.542	0.284			
01/10/2013	3.325	0.208			
01/09/2013	0.024	0.002			
01/08/2013	0.031	0.002			
01/07/2013	2.631	0.164			
01/06/2013	2.857	0.179			
01/05/2013	2.983	0.186			
01/04/2013	2.510	0.157			
01/03/2013	2.744	0.172			
01/02/2013	3.475	0.217			
01/01/2013	3.460	0.216			
12/31/2012	2.799	0.175			
12/30/2012	2.143	0.134			
12/29/2012	2.916	0.182			
12/28/2012	2.879	0.180			
12/27/2012	2.318	0.145			
12/26/2012	2.895	0.181			
12/25/2012	3.471	0.217			
12/24/2012	3.022	0.189			
12/23/2012	2.712	0.170			
12/22/2012	2.426	0.152			
12/21/2012	0.720	0.045			
12/20/2012	1.100	0.069			
12/19/2012	0.976	0.061			
12/18/2012	1.012	0.063			
12/17/2012	1.485	0.093			
12/16/2012	1.570	0.098			
12/15/2012	2.400	0.150			
12/14/2012	1.468	0.092			
12/13/2012	1.945	0.122			
12/12/2012	1.891	0.118			
12/11/2012	1.324	0.083			
12/10/2012	1.276	0.080			
12/09/2012	1.184	0.074			
12/08/2012	0.957	0.060			

ATTACHMENT BB-EU1-I4
PROCEDURES FOR STARTUP AND SHUTDOWN

May 2013

ATTACHMENT BB-EU1-I4 PROCEDURES FOR STARTUP AND SHUTDOWN

Startup and shutdown will be completed in accordance with the manufacturer's recommended operating procedures and based on Brandy Branch Generating Station's best operation and maintenance practices since the startup of the emission unit in April 2001. The emission unit will be operated following the best operational practices to comply with the requirements contained in Specific Condition A.11 of Title V Permit No. 0310485-019-AV, which limits excess emissions resulting from startup and shutdown.



ATTACHMENT BB-EU1-I5
OPERATION AND MAINTENANCE PLAN

May 2013 123-87691

ATTACHMENT BB-EU1-I5 OPERATION AND MAINTENANCE PLAN

JEA will maintain and operate the simple-cycle Combustion Turbine (CT) Unit 1 (EU 001) efficiently to maximum performance and to minimize environmental emissions. JEA will take necessary actions to ensure the unit does not exceed permitted limits, and will remove the unit from service if required. The unit will be operated under the operational guidelines as furnished by the manufacturers and JEA internal guidelines and procedures.



ATTACHMENT BB-EU1-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

May 2013

ATTACHMENT BB-EU1-IV1 IDENTIFICATION OF APPLICABLE REQUIREMENTS

The current Title V air operating permit No. 0310485-019-AV, which contains the applicable requirements for the emissions units at the Brandy Branch Generating Station, is attached. In addition to 40 CFR 60 Subpart 98, Mandatory Greenhouse Gas Reporting, the emissions units are only subject to the federal and state regulations specified in the attached permit.



JEA

Brandy Branch Generating Station Facility ID No. 0310485 Duval County

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Title V Air Operation Permit Renewal

Final Permit No. 0310485-019-AV (Renewal of Title V Air Operation Permit No. 0310485-005-AV)

Permitting Authority

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Permitting Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

> Telephone: 850/488-0144 Fax: 850/921-9533

Compliance Authority

City of Jacksonville

Environmental Resource Management Department
Environmental Quality Division
Air Pollution Source Permitting Section

117 West Duval Street, Suite 225 Jacksonville, Florida 32202

Telephone: 904/630-4900 Fax: 904/630-3638

<u>Title V Air Operation Permit Renewal</u> Permit No. 0310485-019-AV

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Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlic Crist Governor

leff Kollkamp

Michael W. Sole Secretary

PERMITTEE:

JEA 21 West Church Street, Tower 8 Jacksonville, Florida 32202-3139 Permit No. 0310485-019-AV
Brandy Branch Generating Station
Facility ID No. 0310485
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit for the above referenced facility. The existing Branch Generating Station is located at 15701 Beaver Street West, Baldwin City, FL 32234 in Duval County. UTM Coordinates are: Zone 17, 408.81 East (km), 3,354.38 North (km). Latitude is: 30° 19′ 14″; and, Longitude is: 81° 56′ 55″.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2009

Renewal Application Due Date: May 20, 2013

Vilham (or

Expiration Date: December 31, 2013

Joseph Kahn, Director

Division of Air Resource Management

JK/tlv/jh/srm

Subsection A. Facility Description.

This facility consists of three dual-fuel, nominal 170 megawatt (MW) General Electric model PG7241FA combustion turbine-electrical generators and two one-million gallon capacity fuel oil storage tanks. Two of the combustion turbines (EU-002 and EU-003) are configured for combined cycle mode and one (EU-001) for simple cycle operation. Emissions from the units are controlled by Dry Low Nitrogen Oxides (NO_X) (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. For the combined cycle units, selective catalytic reduction (SCR) systems are additionally utilized for further NO_X reductions. Inherently clean fuels and good combustion practices are employed to control all pollutants.

The facility is subject to all applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75. The facility holds ORIS code 7846 under Phase II of the Federal Acid Rain Program.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated	Emissions Units
001	Simple-Cycle Combustion Turbine-Electrical Generator
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired Heat Recovery Steam Generator (HRSG)
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired HRSG
004	Fuel Oil Storage Tank (one-million gallon)
005	Fuel Oil Storage Tank (one-million gallon)
007	Water Cooling - One Fresh Water Mechanical Draft Cooling Tower

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received July 3, 2008, this facility is not a major source of hazardous air pollutants (HAP). This facility is classified as a PSD major facility. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 003
40 CFR 60, Subpart GG	001, 002, 003
40 CFR 75, Acid Rain Monitoring Provisions	001, 002, 003

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section V, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

- FW2. Not federally enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) F.A.C. and 62-210.200 (Definitions), F.A.C., and Jacksonville Environmental Protection Board (JEPB) Rule 2, Part IX]
- FW3. Not federally enforceable. Odor Nuisance. Pursuant to Jacksonville Ordinance Code (JOC) Chapter 376, any facility that causes or contributes to the emission of objectionable odors, which results in the City of Jacksonville Environmental Resource Management Department's (ERMD) Environmental Quality Division (EQD) receiving and validating complaints from five (5) or more different households within a 90 day period, can be cited for objectionable odors. [JOC Chapter 376]
- FW4. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing is deemed necessary and ordered at this time. [Rule 62-296.320(1)(a), F.A.C., 0310485-005-AV]
- FW5. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- FW6. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - a. using paved roads, parking areas, and equipment yards,
 - b. maintenance of paved areas as needed,
 - c. regular mowing of grass and care of vegetation, and
 - d. limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received July 3, 2008.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

- FW7. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. [Rule 62-210.370(3), F.A.C.]
- FW8. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/Air/permitting/tyfee.htm. [Rule 62-213.205, F.A.C.]
- FW9. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]
- FW10. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 1515, Lanham-Seabrook, MD 20703-1515, Telephone: 301/429-5018.
 - b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
 [40 CFR 68]
- FW11. Clean Air Interstate Rule (CAIR) Applicable Units. This facility contains emissions units that are subject to CAIR. On July 11, 2008, the U.S. Court of Appeals for the District of Columbia recommended vacature of the Clean Air Interstate Rule. Because of this decision, the applicable CAIR requirements that were identified in the renewal application are not being included in the permit at this time. If, and at such time that, CAIR is ultimately upheld, you must begin complying with the CAIR program requirements contained in the renewal application and the Title V permit must be revised accordingly. [Rules 62-213.440 and 62-296.470, F.A.C.]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Simple-Cycle Combustion Turbine-Electrical Generator

This emissions unit is comprised of a nominal 170 MW simple-cycle combustion turbine (CT) (Make/Model: General Electric PG7241FA), with a 90-foot exhaust stack. Natural gas is the primary fuel, with low-sulfur distillate fuel oil as the back-up fuel. NO_X emissions are controlled by dry low NO_X (DLN) combustors, and a water injection system for use when firing No. 2 or superior grade distillate fuel oil. The stationary combustion turbine, ducting, and stack is designed so as to not preclude installation of SCR equipment and/or oxidation catalyst equipment in the event of a failure to achieve the NO_X limits given in Specific Condition A.5., or the carbon monoxide (CO) limits given in Specific Condition A.6. Compliance Assurance Monitoring (CAM) does not apply to this emissions unit. Start-up date was: April 20, 2001.

{Permitting note: This emissions unit is regulated under: Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT); Air Construction Permit No. 0310485-001-AC/PSD-FL-267 and amendments (A thru D); and, Power Plant Siting Project No. PA 00-43. The CT began commercial operation on April 20, 2001. Stack height = 90 feet, exit diameter = 18.0 feet, exit temperature = 1,116 °F, actual volumetric flow rate = 2,393,300 acfm.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input rates, based on the lower heating value (LHV) of each fuel at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed the following when firing the corresponding type of fuel:

Unit No.	MMBtu/hr Heat	Fuel Type
	Input	
EU001	1,623	Natural Gas
1,822 No. 2 or s		No. 2 or superior grade of distillate fuel oil

These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions have been provided to the Department of Environmental Protection (DEP) and shall be resubmitted within 45 days of re-establishing the curves due to a compliance test or combustor major turing session.

{Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90 – 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in this permit requires measurement of the process variables for emission tests. Such heat input determinations may be based on measurements of fuel consumption by various methods (including by not limited) fuel flow metering or tank drop measurements, using the heat value of the fuel determining by the vendor or operator to calculate average hourly heat input during the test.}

[Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-213.440(1), F.A.C., 62-214.330, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 8]

A.2. Methods of Operation – Fuels. Only pipeline natural gas or maximum 0.05 percent sulfur content, by weight, No. 2 or superior grade of distillate fuel oil shall be fired. [Rules 62-210.200(Definitions-PTE), F.A.C.; Permit No. 0310485-001-AC, Specific Condition 7, and, Applicant's request in Title V permit renewal application received July 3, 2008]

{Permitting note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.}

A.3. Hours of Operation. The stationary gas turbine shall only operate up to 4,750 hours during any consecutive twelve-month period, of which 750 hours of operation per combustion turbine may be while firing fuel oil. Additionally, the turbine shall be limited to 16 hours per day of fuel oil firing. See also Specific Condition B.3. [Rule 62-210.200(Definitions - PTE), F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 13]

Control Technology

A.4. Control Equipment. Consistent with best operation and maintenance practices, the DLN systems shall each be tuned to optimize emissions reductions and shall be maintained to minimize NO_X emissions and CO emissions. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas. [Rule 62-4.070, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 19]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions A.5. through A.10. are based on the specified averaging time of the applicable test method.

- A.5. Nitrogen Oxides (NO $_{x}$).
 - a. Data Substitution. For the sole purpose of Acid Rain reporting, when NO_X monitoring data are not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).
 - b. While firing Natural Gas. The emission rate of NO_X in the exhaust gas shall not exceed 69.3 lbs/hr (at ISO conditions) on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO_X emissions calculated as NO₂ (at ISO conditions) shall not exceed 10.5 ppmvd @ 15% O₂ to be demonstrated by annual stack test. Note: Basis for lbs/hr limit is 10.5 ppmvd @ 15% O₂, full load.
 - c. While firing Fuel Oil. The concentration of NO_X in the exhaust gas shall not exceed 42 ppmvd at 15% O₂ on the basis of a 3-hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_X emissions calculated as NO₂ (at ISO conditions) shall not exceed 42 ppmvd @ 15% O₂ to be demonstrated by stack test.
 - d. After Firing Fuel Oil For 400 Hours. After combusting fuel oil for at least 400 hours on any individual combustion turbine (CT), the permittee shall prepare and submit for the DEP's review and acceptance an engineering report regarding the lowest NO_x emission rate that can consistently be achieved when firing distillate oil. This lowest recommended rate shall include a reasonable operating margin, taking into account long-term performance expectations and good operating and maintenance practices. The DEP may revise the NO_x emission rate based upon this report.

[Rule 62-212.400, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 21]

- A.6. Carbon Monoxide (CO). The concentration of CO in the exhaust gas when firing natural gas shallnot exceed 15 ppmvd when firing natural gas and 20 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions shall not exceed 48.0 lbs/hr (when firing natural gas) and 65.0 lbs/hr (when firing fuel oil) as indicated by EPA Method 10. [Rule 62-212.400, F.A.C.; Permit No. 0310485-001-AC, Specific Condition 22]
- A.7. Sulfur Dioxide (SO₂) and Sulfuric Acid Mist (SAM). SO₂ and SAM emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 2 grains per 100 standard cubic feet) and 0.05% sulfur content, by weight, fuel oil. Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedule in Specific Conditions A.12. and E.5. will demonstrate compliance with the applicable NSPS SO₂ emissions limitations from the combustion turbine. [40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.; BACT; and, Permit No. 0310485-004-AC, Specific Condition 23 (as revised in permit modification letter dated 4/12/01)]

{Permitting Note: This will effectively limit the combined SO₂ emissions for EU001, EU002 and EU003 to 117 TPY.}

- A.8. <u>Visible emissions (VE)</u>. VE emissions shall not exceed 10 percent opacity when firing natural gasor No. 2 or superior grade of fuel oil. [Permit No. 0310485-001-AC, Specific Condition 24]
- A.9. Particulate Matter (PM). PM emissions shall not exceed 9.0 lbs/hr (front catch) while firing natural gas and 17.0 lbs/hr (front catch) while firing fuel oil as indicated by opacity. [Permit No. 0310485-001-AC, Specific Condition 24]
- A.10. Volatile Organic Compounds (VOC). The concentration of VOC in the exhaust gas shall not exceed 2 ppmvd when firing natural gas and 3.5 ppmvd when firing fuel oil as assured by EPA Methods 18 and/or 25A. VOC emissions (at ISO conditions) shall not exceed 4.0 lb/hr (when firing natural gas) and 7.5 lb/hr (when firing fuel oil) as indicated by EPA Methods 18 and/or 25A. [0310485-001-AC, Specific Condition 25]

Excess Emissions

Rule 62-210.700(Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- **A.11.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided:
 - a. Best operational practices are adhered to and the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period for other reasons, unless specifically authorized by the DEP for longer duration;
 - b. Operation below 50% output while firing fuel oil (and below 62 gross megawatts while firing natural gas) shall be limited to 2 hours per unit cycle (breaker closed to breaker open);
 - c. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C.

[Permit No. 0310485-001-AC, Specific Condition 26; Permit No. 0310485-010-AC (revision dated 1/18/2005) Rules 62-210.700(1) - (5), F.A.C.]

Monitoring of Operations

- **A.12.** Natural Gas Monitoring Schedule. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60 Subpart GG:
 - a. Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
 - b. JEA shall notify the DEP and the ERMD-EQD of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 standard cubic feet of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.

[Permit No. 0310485-001-AC, Specific Condition 45; and, 40 CFR 60.334(h)(3)]

{Permitting note: Due to amendments to 40 CFR 60, Subpart GG, monitoring of the total sulfur content of the gaseous fuel combusted is not required if pipeline-supplied natural gas is used.}

Continuous Monitoring Requirements

- A.13. Continuous Monitoring System (CEMS). The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from the CT unit. Periods when NO_X emissions are above the standards as listed in Specific Condition A.5., shall be reported to the ERMD-EQD office pursuant to Rule 62-4.160(8), F.A.C. Following the format of 40 CFR 60.7, periods of startup, shutdown and malfunction shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards listed in Specific Condition A.5., except as noted in Specific Condition A.19. [Rule 62-204.800, F.A.C.; 40 CFR 60.7; and, Permit No. 0310485-001-AC, Specific Condition 41]
- A.14. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60.7(a)(5) or 40 CFR 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F, or 40 CFR 75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the ERMD-EQD office no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. [Permit No. 0310485-001-AC, Specific Condition 43]

Test Methods and Procedures

A.15. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (or RATA test data) shall be used to demonstrate compliance with the short-term NO _X BACT limits
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and

Page 8

Method	Description of Method and Comments
	Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Permit No. 0310485-001-AC]

- A.16. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emissions standards, pursuant to Rule 62-297.310(7), F.A.C., for NO_X, VE and CO. EPA reference methods described in Specific Condition A.15. shall be used. Method 7E or RATA test data required pursuant to 40 CFR 75 may be used to demonstrate compliance for annual compliance testing. Annual compliance testing for CO may be conducted concurrent with the annual RATA testing for NO_X as long as all testing requirements of 40 CFR 75 are met. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. [Rule 62-297.310(7), F.A.C. and Permit No. 0310485-001-AC, Specific Condition 29 and 32]
- A.17. Compliance Tests Prior to Renewal. Except as provided for in condition TR7. of Appendix TR, Testing Requirements, this emissions unit shall be tested for the following pollutants prior to obtaining a renewed operation permit: NO_X, VE, VOC and CO. [Rule 62-297.310(7)(a)3., F.A.C.]
- A.18. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.19. Continuous Compliance With the NO_X Emission Limits. Continuous compliance with the NO_X emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN technology while burning gas) or a 3-hr average (SCR technology or while burning oil). For the 24-hr block average (lb/hr) emissions may be determined via EPA Method 19 or equivalent EPA approved methods. Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period when applicable). Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction as defined in Rule 62-210.200, F.A.C., where emissions exceed the applicable NO_X standard. These excess emissions periods shall be reported as required in Specific Conditions A.11. and A.24. A valid hourly emission rate shall be calculated for each hour in which at least two NO_X concentrations are obtained at least 15 minutes apart. [Rules 62-4.070, F.A.C. and 62-210.700, F.A.C.; 40 CFR 75; and, Permit No. 031485-001-AC, Specific Condition 30]
- A.20. Compliance with the SO₂ and PM/PM₁₀ Emission Limits. Notwithstanding the requirements of Rule 62-297.310(7), F.A.C., the use of pipeline natural gas and maximum 0.05 percent sulfur (by weight) No. 2 or superior grade distillate fuel oil, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60Subpart GG SO₂ standard and the 0.05% sulfur limit, fuel oil analysis using ASTM D2880-941 or D4294-90 (or equivalent latest version) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent latest version) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75, Appendix D, may be utilized. The applicant is responsible for ensuring that the procedures above are used

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60 Subpart GG. [Permit No. 0310485-001-AC, Specific Condition 31]

- A.21. Compliance With The CO Emission Limit. Annual compliance testing for CO may be conducted concurrently with the annual RATA testing for NO_X required pursuant to 40 CFR 75 (required for gas only). [Permit No. 0310485-001-AC, Specific Condition 32]
- A.22. <u>Volatile Organic Compounds (VOC) Emissions</u>. The CO emission limit shall be employed as a surrogate and no annual VOC testing is required. [Permit no. 0310485-001-AC, Specific Condition 33]
- A.23. Operating Rate During Testing. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Rule 62-204.800 F.A.C. [Rules 62-297.310(2) & (2)(b), F.A.C.; and, 0310485-001-AC, Specific Condition 34]

Record keeping and Reporting Requirements

See Subsection E. Common Conditions and Appendix RR, Facility-Wide Reporting Requirements for additional reporting requirements.

- A.24. Excess Emissions/Malfunction Report. If excess emissions occur due to malfunction, the owner or operator shall notify the ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rules 62-4.130, F.A.C. and 62-210.700(6), F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 27]
- A.25 Emission Compliance Stack Test Reports. A test report indicating the results of the required compliance tests shall be filed as per Appendix TR, Testing Requirements. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the ERMD-EQD to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C. [Permit No. 0310485-001-AC, Specific Condition 39]
- **A.26.** Special Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records related to fuel usage as specified below:
 - a. Hours of operation:
 - (1) shall be submitted with the Annual Operation Report (AOR) for the prior year;
 - (2) shall be kept for each consecutive 12-month period by fuel type; and,
 - (3) daily hours of fuel oil operation shall be kept during any day in which fuel oil is fired.

[Permit No. 0310485-001-AC, Specific Condition 40]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

Common Conditions

A.27. This emissions unit is also subject to conditions E.1. through E.11. contained in Subsection E. Common Conditions.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Units 002, 003

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary- fired (natural gas) HRSG Duct Burners

Each emissions unit is comprised of a nominal 170 MW (Make/Model: General Electric PG7241 FA) stationary combustion turbine-electrical generator equipped with an evaporative cooler, a supplementary-fired (natural gas) heat recovery steam generator (HRSG) duct burner, an associated 190-foot stack, and a selective catalytic reduction (SCR) unit for reducing NO_x emissions, including ancillary equipment and ammonia storage; in addition, the emission units share one nominal 200 MW steam electrical generator and one freshwater cooling tower. For the CTs, natural gas is the primary fuel, with low-sulfur distillate fuel oil as the back-up fuel. Compliance Assurance Monitoring (CAM) does not apply to these emissions units. Initial startup was 11/27/2004 for both EUs 002 and 003.

{Permitting note: These emissions units are regulated under: Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT); PSD-FL-310 and amendments (A thru F); and, Power Plant Siting Project No. PA 00-43. The CT began commercial operation on November 27, 2004. Stack height = 190 feet, exit diameter = 18.0 feet, exit temperature = 204°F, actual volumetric flow rate = 1,009,200 acfm.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity.

a. Combustion Turbines. The maximum heat input rates, based on the higher heating value (HHV) of the fuel to these units shall not exceed:

Unit No(s).	MMBtu/hr Heat Input	Fuel Type
EU002 and	1,911	Natural Gas
EU003	2,060	Oil

This maximum heat input rate will vary depending upon turbine inlet conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions have been provided to the Department of Environmental Protection (DEP) and shall be re-submitted within 45 days of re-establishing the curves due to a compliance test or combustor tuning session. [Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-214.330, F.A.C.; Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 8]

b. HRSG equipped with Duct Burners. The maximum heat input rate of each natural gas-fired HRSG duct burner shall not exceed 200 MMBtu/hr (HHV). [Rule 62-210.200(Definitions-PTE), F.A.C.; Permit Nos.0310485-003-AC, Specific Condition 9, 0310485-006-AC/PSD-FL-310(A) and 0310485-017-AC/PSD-FL-310(F)]

Subsection B. Emissions Units 002, 003

- B.2. Methods of Operation Fuels. The facility is authorized to burn any combination of natural gas (2.0 grains sulfur/100 scf), low sulfur fuel oil (0.05% sulfur content, by weight) and lower sulfur fuel oil (0.0065% sulfur content, by weight). The combinations of these fuels are subject to the hour limitations and recordkeeping requirements set forth in this permit. Unless otherwise authorized by this permit, CT operation below 65 gross megawatts shall be limited to 2 hours during each calendar day. [Rules 62-210.200(Definitions PTE), F.A.C.; PSD-FL-310, Specific Condition 7; Permit Nos. 0310485-007-AC and 0310485-015-AC]
- 8,760 hours per year while firing natural gas (2.0 grains sulfur/100 scf). The combined cycle units are authorized to operate up to a combined maximum of 576 actual plus "equivalent hours" per consecutive 12-month period while firing 0.05% sulfur content, by weight, fuel oil OR a combined maximum of 1,478 actual plus "equivalent hours" while firing 0.0065% sulfur content, by weight, fuel oil per consecutive 12-month period, whichever occurs first. The simple cycle unit is authorized to operate up to a maximum of 750 actual plus "equivalent hours" per consecutive 12-month period, while firing either 0.05% or 0.0065% sulfur content, by weight, fuel oil, whichever occurs first. Tracking of "equivalent hours" shall conform with and be recorded as defined within this permit. Additionally, the following requirements shall apply:
 - a. 0.05% Sulfur Fuel Oil. In the event that any of the 3 emission units (simple or combined cycle) fires No. 2 distillate fuel oil (0.05% sulfur content, by weight) during a calendar day, that unit shall be limited to 16 hours of daily operation on any fuel. Additionally, the other 2 units shall not be fired on any of the allowable fuels for that calendar day.
 - b. 0.0065% Sulfur Fuel Oil. In the event that the simple cycle unit fires lower sulfur oil (0.0065% sulfur content, by weight) during any calendar day, but for 8 hours or less, the combined cycle units may fire any combination of lower sulfur oil (0.0065% sulfur content, by weight) or natural gas (2 grains/100 scf) during that calendar day.
 - c. 0.0065% Sulfur Fuel Oil More Than 8 Hours. In the event that the simple cycle unit fires lower sulfur fuel oil (0.0065% sulfur content, by weight) for more than 8 hours during a calendar day, it shall be allowed 24 hours of daily operation while the combined cycle units shall not be fired on any fuel for the calendar day.
 - d. HRSG Duct Burners. Each HRSG duct burner operation shall not exceed 4,500 hours per consecutive 12-months. (See Specific Condition **B.32.a.(3)**.

[Rules 62-210.200(Definitions - PTE) and 62-212.400(12), F.A.C.; Permit Nos.0310485-003-AC/PSD-FL-310, Specific Condition 14, 0310485-007-AC/PSD-FL-310(B) and 0310485-017-AC/PSD-FL-310(F)]

{Permitting note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.}

Control Technology

- B.4. Control Equipment. Dry Low NO_X (DLN) combustors and a selective catalytic reduction system shall be installed on each stationary combustion turbine to comply with the NO_X and ammonia limits listed in this permit. Wet injection shall additionally be installed on each stationary combustion turbine for use during fuel oil firing, in conjunction with the SCR. [Design; Rules 62-4.070, F.A.C. and 62-212.400, F.A.C.; and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Conditions 16 & 17]
- **B.5.** <u>Selective Catalytic Reduction System</u>. EU002 and EU003 shall be operated with the use of the SCR system, except during periods of startup and shutdown in accordance with the manufacturer's requirements. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 45]

Subsection B. Emissions Units 002, 003

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **B.6.** - **B.12**. are based on the specified averaging time of the applicable test method.

- B.6. Nitrogen Oxides (NO_X). The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on natural gas and the duct burner on, shall not exceed 3.5 ppmvd @ 15% O₂ on a 3-hr block average. The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil (duct burner firing not permitted), shall not exceed 15.0 ppmvd @ 15% O₂ on a 3-hr block average. Compliance shall be determined by the continuous emission monitor (CEMS). [BACT; Rule 62-212.400, F.A.C.; and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 20]
- B.7. Ammonia. The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 5.0 ppmvd @ 15% O₂ while firing natural gas, nor 9 ppmvd @ 15% O₂ while firing oil. [BACT; Rules 62-212.400, F.A.C. and 62-4.070, F.A.C.; and, PSD-FL-310]
- B.8. <u>Carbon Monoxide (CO)</u>. Emissions of CO in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on any fuel (with duct burners on or off) shall not exceed 14 ppmvd @ 15% O₂, on a 24-hr block average to be demonstrated by CEMS. [BACT; Rule 62-212.400, F.A.C.; Permit No. 0310485-006-AC, and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 21]
- B.9. Volatile Organic Compounds (VOC). Emissions of VOC in the stack exhaust gas (base load at ISO conditions) with the combustion turbine operating on gas shall not exceed 6.81 lbs/hour (4.0 lbs/hour with duct burners off) and with the combustion turbine operating on oil shall not exceed 7.68 lbs/hr. See Specific Condition B.25. [BACT; Rule 62-212.400, F.A.C.; Permit No. 0310485-006-AC, and, 0310485-003-AC/PSD-FL-310, Specific Condition 22]
- B.10. Sulfur Dioxide (SO₂) and Sulfuric Acid Mist (SAM). SO₂ and SAM emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 2 grains per 100 standard cubic feet) and a limited amount of 0.05% sulfur content, by weight, fuel oil (or superior). Compliance with this requirement will demonstrate compliance with the applicable NSPS SO₂ emissions limitations from the combustion turbines as well as the duct burners. [BACT; 40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400 and 62-204.800(7), F.A.C.; Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 23; and, 0310485-016-AV]
- B.11. Particulate Matter (PM/PM₁₀). PM/PM₁₀ emissions from each combustion turbine and HRSG train shall not exceed 22.02 lbs/hr at 100% output firing natural gas with the duct burner on and 62.1 lbs/hr at 100% output firing fuel oil to be demonstrated by opacity. [BACT; Rules 62-4.070, F.A.C. 62-212.400, F.A.C. and 62-204.800(7), F.A.C.; Permit No. 0310485-006-AC and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 24]
- B.12. Visible emissions (VE). VE emissions shall not exceed 10 percent opacity from the stack in use. [BACT; Rules 62-4.070, F.A.C. 62-212.400, F.A.C. and 62-204.800(7), F.A.C.; Permit No. 0310485-006-AC and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 25]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

Subsection B. Emissions Units 002, 003

- **B.13.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided:
 - a. Best operational practices are adhered to and the duration of excess emissions shall be minimized;
 - b. Excess emissions occurrences shall in no case exceed two hours in any calendar day except during startup, shutdown or during DLN Major_Tuning as described in the alternate NO_X and CO emissions standards below;
 - c. A startup of any type is defined as being complete upon the first 3-hour block NO_X average of 3.5 ppmvd or less (15 ppmvd or less for oil firing); and,
 - d. Operation below 65 gross MW output per turbine shall otherwise be limited to 2 hours in any 24-hour period except for periods of startup, shutdown or DLN Major Tuning.

[Rules 62-212.400(2)(d) and (e), F.A.C., and 62-210.700(1) - (5), F.A.C.; Permit Nos. 0310485-012-AC and 0310485-015-AC, and Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 25]

B.14. Excess Emissions Allowed Due to Tuning.

Alternate NO_X and CO Emissions Standards: During any calendar day, in which at least one hour of startup, shutdown or DLN major tuning session has occurred, the following alternate emission limits shall apply to each combined cycle combustion turbine:

- a. An alternate NO_x limit of 3,000 lbs shall apply if natural gas is the exclusively fired fuel;
- b. An alternate NO_X limit of 8,880 lbs shall apply if any fuel oil is fired; and,
- c. An alternate CO limit of 4,200 lbs shall apply when firing either natural gas or fuel oil. [Rules 62-212.400(2)(d) and (e), F.A.C.; Permit No. 0310485-014-AC]
- **B.15.** Excess Emissions Not Allowed. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Continuous Monitoring Requirements

- **B.16.** Continuous Monitoring Systems (CEMS).
 - a. CEM Requirement. The permittee shall install, calibrate, maintain, and operate a continuous emission monitors in the stack to measure and record the emissions of NO_X and CO from these emissions units, and the carbon dioxide (CO₂) content of the flue gas at the location where NO_X and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit.
 - b. Compliance demonstration using CEM. The CEM system shall be used to demonstrate compliance with the emission limits for NO_x and CO established in this permit. Compliance with the emission limits for NO_x shall be based on a 3-hour block average. The 3-hour block average shall be calculated from 3 consecutive hourly average emission rate values. Compliance with the emission limits for CO shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 consecutive hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0%) moisture). Alternatively, the owner or operator may develop an algorithm based on fuel characteristics and stack CO₂ (or O₂) measurements to calculate the moisture content in the exhaust gas to enable

Subsection B. Emissions Units 002, 003

- correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.
- c. NO_X Monitor Requirements. The NO_X monitor shall be certified and operated in accordance with the following requirements. The NO_X monitor shall be certified pursuant to 40 CFR 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. For purposes of determining compliance with the emission limits specified within this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 3 or 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E, Appendix A, 40 CFR 60. The NO_X monitor shall be a dual range monitor. The span values for the NO_X monitor will be determined in accordance with section 2.1.2 in Appendix A, 40 CFR 75.
- d. CO Monitor Requirements. The CO monitor and CO₂ monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specifications 4 and 4A. The CO₂ monitor shall be certified and maintained pursuant to 40 CFR 75. Quality assurance procedures for the CO monitor shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to EQD and the Department's Northeast District office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, Appendix A, 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall not be greater than 20 ppm, and the span for the upper range shall be set as appropriate to reflect the level of CO emissions seen during unit startup. The RATA tests required for the CO₂ monitor shall be performed using EPA Method 3A or 3B, Appendix A, 40 CFR 60.
- e. CEMS Excluded Data. NO_X, CO and CO₂ emissions data shall be recorded by the CEM system during episodes of DLN major tuning, startup, shutdown and malfunction. Periods of data excluded for malfunctions shall not exceed two hours in any calendar day. All periods of data excluded for any startup, shutdown, DLN major tuning or malfunction episode shall be consecutive for each episode. Periods of data excluded for start-up, shutdown or DLN major tuning are subject to the alternate NO_X and CO emissions standard. The owner or operator shall minimize the duration of data attributed to DLN major tuning, startup, shutdown and malfunctions, to the extent practicable. Data recorded during DLN major tuning, startup, shutdown or malfunction events shall not be excluded if the DLN major tuning, startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented.
- f. Failure to Maintain or Operate. Best operational practices shall be used to minimize hourly emissions that occur during episodes of DLN major tuning, startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.
- g. Reporting. A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to EQD office and the Department's Northeast District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.
- h. Compliance Demonstration with Subpart GG. Upon request from the ERMD-EQD, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40

Subsection B. Emissions Units 002, 003

CFR 60 Subpart GG. JEA shall be permitted to utilize O₂ as a diluent (rather than CO₂), but shall notify the ERMD-EQD of this change prior to CEMS installation.

[Rule 62-204.800; 40 CFR 60.7; 0310485-014-AC, and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 41]

{Permitting note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures}

B.17. Fuel Monitoring Schedule. An optional SO₂ Emissions Data Protocol (without additional EPA approvals) for Gas-Fired and Oil-Fired Units pursuant to 40 CFR 75, Appendix D, for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60 Subpart GG provided the following requirement is met: Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 42]

Test Methods and Procedures

B.18. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.} This testing may be conducted during the NO _X RATA tests, which includes loads that are less than permitted capacity.
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip for ammonia slip during oil firing (I) and natural gas firing (I, A). The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O ₂) at the measured lbs/hr NO _X emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the ERMD-EQD's request, according to Specific Condition B.27 .

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [PSD-FL-310]

{Permitting Note: The 40 CFR 60 Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s). [PSD-FL-310]}

Subsection B. Emissions Units 002, 003

- **B.19.** Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), these emissions units shall be tested to demonstrate compliance with the emissions standards for NO_x, CO, ammonia, and VE. RATA testing, required pursuant to 40 CFR 75, for CO and NO_x CEMS may be utilized to demonstrate annual compliance. [Rule 62-297.310(7), F.A.C., Permit No. 0310485-003-AC/PSD-FL-310, Conditions 29 and 32]
- **B.20.** Compliance Tests Prior to Renewal. Except as provided for in condition **TR7** of Appendix TR, Testing Requirements, these emissions units shall be tested for the following pollutants prior to obtaining a renewed operation permit: NO_x, CO, ammonia, VOC and VE. [Rule 62-297.310(7)(a)3., F.A.C. and Permit No. 0310485-003-AC/PSD-FL-310, Condition 29]
- **B.21.** Initial Testing Requirements. Initial compliance tests meeting the requirements of 40 CFR 60.8 shall be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or change of combustors, if specifically requested by the ERMD-EQD on a case-by-case basis. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 29]
- B.22. Continuous Compliance with the CO and NO_x Emission Limits. Continuous compliance with the CO and NO_x emission limits shall be demonstrated by the CEM system on the specified hour average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each period and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous period. Specific Condition B.16. further describes the CEM system requirements. Excess emissions periods shall be reported as required in Specific Condition B.13., B.14., B.28., and B.29. Since CEMS are used for compliance, testing at four separate loads is not required for demonstrating initial compliance under 40 CFR 60 Subpart GG consistent with recent EPA guidance. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 30; Rules 62-4.070, F.A.C. and 62-210.700, F.A.C.; 40 CFR 75; and, BACT]
- B.23. Compliance with the SO₂ and PM/PM₁₀ emission limits. For the purposes of demonstrating compliance with the 40 CFR 60 Subpart GG SO₂ standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75, Appendix D, may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60 Subpart GG or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60 Subpart GG. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 31]
- **B.24.** Compliance with the CO Emission Limit. Annual RATA testing for the CO and NO_X CEMS shall be required pursuant to 40 CFR 75. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 32]
 - {Permitting Note: 40 CFR 75 does not address RATA requirements for CO CEMS. The required annual RATA testing for the CO CEMS shall be performed instead as required by 40 CFR 60 Appendix B.}
- B.25. Compliance with the VOC Emission Limit. Continuous monitoring of CO shall represent a surrogate for VOC emissions and provide assurance that the emission rates of the BACT Determination are being met. [BACT; Rule 62-212.400, F.A.C.; Permit No. 0310485-006-AC, and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 33]
- **B.26.** Operating Rate during Testing. Unless otherwise specified, testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the

Subsection B. Emissions Units 002, 003

maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Rule 62-204.800 F.A.C. [Rules 62-297.310(2) & (2)(b), F.A.C.; and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 34]

B.27. Selective Catalytic Reduction System (SCR) Compliance Procedures.

- a. NO_X and Ammonia Annual Testing. An annual stack emission test for nitrogen oxides and ammonia from the CT/HRSG pair shall be simultaneously conducted while firing natural gas and operating with the duct burner on as defined in Specific Condition B.6. The ammonia injection rate necessary to comply with the NO_X standard shall be established and reported during each annual performance test.
- b. SCR Operation. The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods, as dictated by manufacturer's guidelines and in accordance with this permit.
- c. Ammonia Flow Meter. The permittee shall install and operate an ammonia flow meter to continuously measure and record the ammonia injection rate to the SCR system of the CT/HRSG set. It shall be maintained and calibrated according to the manufacturer's specifications.
- d. Ammonia Flow Rate. During the stack test, the permittee (at each tested load condition) shall determine and report the ammonia flow rate required to meet the emissions limitations. During NO_X CEM downtimes or malfunctions, the permittee shall operate at the ammonia flow rate, which was established during the last stack test.
- e. Emission Calculations. Ammonia emissions shall be calculated continuously using inlet and outlet NO_x concentrations from the SCR system and ammonia flow supplied to the SCR system. The calculated ammonia slip shall be used as an indicator of ammonia slip, and to assist in determining appropriate injection rates, but not as the method of determining compliance. A calculated ammonia slip above the permitted value shall result in JEA taking appropriate and timely action, and documenting each event from its occurrence to its resolution. The calculation procedure shall be provided with the CEM monitoring plan required by 40 CFR 75. The following calculation represents one means by which the permittee may demonstrate compliance with this condition:

Ammonia slip @ 15% $O_2 = (A-(B \times C/1,000,000)) \times (1,000,000/B) \times D$, where:

- A = ammonia injection rate (lbs/hr)/17 (lbs/lb-mol).
- B = dry gas exhaust flow rate (lbs/hr)/29 (lbs/lb-mol).
- $C = \text{change in measured NO}_X \text{ (ppmv @ 15% O}_2) \text{ across catalyst.}$
- D = correction factor, derived annually during compliance testing by comparing actual to tested ammonia slip.
- f. Reporting. The calculation along with each newly determined correction factor shall be submitted with each annual compliance test. Calibration data ("as found" and "as left") shall be provided for each measurement device utilized to make the ammonia emission measurement and submitted with each annual compliance test.
- g. Re-Testing. Upon specific request by the local compliance authority (ERMD-EQD) or the DEP, a special re-test shall occur as described in the previous conditions concerning annual test requirements, in order to demonstrate that all NO_x and ammonia slip related permit limits can be complied with.

Subsection B. Emissions Units 002, 003

[Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 45]

Record keeping and Reporting Requirements

See Subsection E. Common Conditions and Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Excess Emissions/Malfunction Report. If excess emissions occur due to malfunction, the owner or **B.28.** operator shall notify the ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the ERMD-EQD may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, and using the monitoring methods listed in this permit, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions B.6. through B.12. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the ERMD-EOD as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rules 62-4.130, F.A.C. and 62-210.700(6), F.A.C.]

B.29. DLN Major Tuning:

- a. Notification. At least one business day prior to performing any major tuning session, the permittee shall provide the ERMD-EQD's Compliance Authority with an advance notice that details the activity and proposed major tuning schedule. The notice may be by letter, facsimile transmittal, or electronic mail. Once the major tuning session is completed, the ERMD-EQD's Compliance Authority shall be notified in a like manner, within one business day. Within 15 days of completion of the major tuning session, the excluded CEMS data shall be forwarded to the ERMD-EQD's Compliance Authority. CEMS data shall not be excluded from any Acid Rain reporting requirements.
- b. Compliance Data. Data collected during periods covered by the alternate emissions standard provisions of Specific Condition **B.14**. may be excluded from the compliance determination calculation requirements of Specific Conditions **B.6**. and **B.8**.

[Design; and, Rule 62-4.070(3), F.A.C., 0310485-014-AC]

- B.30. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60.7(a)(5) or 40 CFR 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F, or 40 CFR 75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the ERMD-EQD office no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. [0310485-001-AC/PSD-FL-310]
- B.31. Compliance Test Reports. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the ERMD-EQD to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 39]

Subsection B. Emissions Units 002, 003

- **B.32.** Special Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records:
 - a. Hours of operation shall be:
 - (1) submitted with the Annual Operation Report (AOR) for the prior year for each combustion turbine by fuel type;
 - (2) kept for each consecutive 12-month period for each combustion turbine by fuel type; and
 - (3) kept for each consecutive 12-month period while firing natural gas for each HRSG duct burner. (See Specific Condition **B.3.d.**)
 - b. Daily hours shall be kept for:
 - (1) fuel oil and natural gas operation for each combustion turbine during any day in which fuel oil is fired;
 - (2) when the CT is being fired and the SCR is not in service, along with support documentation demonstrating that the unit was in a DLN Major Tuning, startup or shutdown condition; and
 - (3) (as-fired) sulfur content of fuel oil for each combustion turbine during any day in which fuel oil is fired.

[Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 40; and, Permit Nos. 0310485-017-AC/PSD-FL-310(F), 0310485-014-AC and 0310485-012-AC]

B.33. Recordkeeping Requirements and Fuel Switching: Upon prior written notification, JEA may switch between firing 0.05% or 0.0065% sulfur content, by weight, fuel oil on a calendar day basis (i.e. switching is not authorized within any calendar day). A record shall be made every day for each emission unit documenting: the fuel type actually used, the number of actual hours of firing each fuel type, and (for the hours when any oil is fired) the "equivalent hours" for the fuel oil which was not fired. The following shall be used to determine the "equivalent hours": each actual hour of combustion of 0.05% sulfur content, by weight, distillate oil shall equate to 2.6 "equivalent hours" of lower sulfur oil (0.0065% sulfur content, by weight) combustion and each actual hour of firing lower sulfur oil (0.0065% sulfur content, by weight) shall equate to 0.39 "equivalent hours" of 0.05% sulfur content, by weight, fuel oil combustion. At the end of each calendar month, the total number of "equivalent hours" plus actual hours shall be determined. A running total shall be maintained in order to ensure compliance with Specific Condition B.3. [Permit No. 0310485-007-AC/PSD-FL-310(B); Rule 62-210.700(6), F.A.C.]

Common Conditions

B.34. This emissions unit is also subject to conditions **E.1. through E.11.** contained in **Subsection E.** Common Conditions.

Subsection C. Emissions Units 004, 005

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
004	Fuel Oil Storage Tank (one-million gallon)
005	Fuel Oil Storage Tank (one-million gallon)

Emissions units 004 and 005 are two one-million (1,000,000) gallon capacity No. 2 distillate fuel oil storage tanks. The tanks are of a vertical fixed-roof design. The emissions points are breather valves on the dome roofs, located at 40 feet above ground level. The start-up date was April 16, 2001.

{Permitting note: These emissions units are not subject to the provisions of 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800(7)(b), F.A.C.; and, PSD-FL-267 (0310485-001-AC)}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(Definitions-PTE), F.A.C.]

Recordkeeping Requirements

C.2. On-Site Records. The permittee shall maintain records on site for storage vessels identification numbers 004 and 005 to include the date of construction, the material storage capacity, and type of material stored for the life of these storage vessels. [40 CFR 60.116b(b)]

Subsection D. Emissions Unit 007

The specific conditions in this section apply to the following emissions unit:

E	U. ID No.	Brief Description
	007	Water Cooling - One Fresh Water Mechanical Draft Cooling Tower

Emissions Unit 007 is not subject to a NESHAP because chromium-based chemical treatment is not used.

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(Definitions-PTE), F.A.C.]

Control Technology

D.2. Control Equipment. Drift eliminators shall be installed on the cooling tower to reduce PM/PM₁₀ emissions. [PSD-FL-310]

Subsection E. Common Conditions

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
001	Simple-Cycle Combustion Turbine-Electrical Generator (nominal 170 megawatt)
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary- fired (natural gas) HRSG Duct Burners

General Requirements

- E.1. <u>Definitions</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee (ERMD-EQD). [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- E.2. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.; and, 0310485-001-AC, Specific Condition 11]

Essential Potential to Emit (PTE) Parameters

E.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Continuous Monitoring Requirements

- E.4. CEMS in lieu of Water to Fuel Ratio. The NO_X CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60, Subpart GG. The calibration of the water/fuel-monitoring device required in 40 CFR 60 Subpart GG will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon request from the ERMD-EQD office, the CEMS emission rates for NO_X shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60 Subpart GG. [Permit No. 0310485-001-AC, Specific Condition 42; PSD-FL-310]
- E.5. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the JEA's Brandy Branch Generating Station, an analysis which reports the sulfur content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60 Subpart GG. [Permit Nos. 0310485-001-AC, Specific Condition 44, 0310485-012-AC; 0310485-003-AC/PSD-FL-310, Specific Condition 42]

Subsection E. Common Conditions

Excess Emissions

- E.6. NSPS Excess Emissions. For emission units that elect to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content required under 40 CFR 60 Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emission s shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime shall be reported as defined in 40 CFR 60.334. [40 CFR 60.334]
- E.7. NO_x Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.334(j)(1). [40 CFR 60.334(j)(1)]
- E.8. <u>SO₂ Excess Emissions</u>. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.334(j)(2). [40 CFR 60.60.334(j)(2)]

Test Methods and Procedures

E.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Record keeping and Reporting Requirements

E.10. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emissions required by 40 CFR 60.334	Postmarked by 30th day following end of each 6 month period	60.334(j)(5)

E.11. Records. All measurements, records, and other data required to be maintained by JEA shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and the ERMD-EQD representatives upon request. [Permit Nos. 0310485-001-AC/PSD-FL-267, Specific Condition 38; and 0310485-003-AC/PSD-FL-310, Specific Condition 38; 40 CFR 60.7(f)]

Operated by: JEA . ORIS Code: 7846

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Description
001	Simple-Cycle Combustion Turbine-Electrical Generator (nominal 170 megawatt)
002	Combined-Cycle Combustion Turbine-Electrical Generator with duct burner
003	Combined-Cycle Combustion Turbine-Electrical Generator with duct burner

- A.1. The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
 - a. DEP Form No. 62-210.900(1)(a), dated 05/06/08, received 07/03/08. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- A.2. Sulfur dioxide (SO₂) allowance allocations and nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2009	2010	2011	2012	2013
001	001	SO ₂ allowances, under	0	0	0	0	0
		Table 2or 3 of 40 CFR 73	_				
002	002	SO ₂ allowances, under	0	0	0	0	0
		Table 2or 3 of 40 CFR 73	`				
003	003	SO ₂ allowances, under	0	0	0	0	0
		Table 2or 3 of 40 CFR 73				•	

- * The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2, 3, or 4 of 40 CFR 73.
- A.3. <u>Emission Allowances</u>. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
 - b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
 - c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]
- A.4. Comments, notes, and justifications: None.

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.

Brandy Branch	Florida	7846
Plant name	State	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."

à	b	C	d	е		
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		
001	No	Yes				
002	No	Yes				
003	No	Yes				
		Yes				
		Yes				
		Yes				
		Yes				
		Yes				
		Yes				
		Yes				
		Yes				
		Yes				

DEP Form No. 62-210.900(1)(a) - Form

Effective: 3/16/08

Brandy Branch Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

- The designated representative of each Acid Rain source and each Acid Rain until at the source shall:
 Submit a complete Acid Rain Part application (including a compliance ptan) 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
 - (8) Submit in a timely manner any supplemental information that the DEP determines is necessary application and issue or deny an Acid Rein 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 (saued by the DEP; and (8) 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 compilance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for suffer dioxide and nitrogen oxides under the Acid Rain
- (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to munitor emissions of other pollutar 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 put

 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 until at the source shaft:

 (i) Hold allowances, as of the atowance transfer deadline, in the unit's compliance subseccount (efter deductions under 40 CFR 73.34(c)), or in the compliance subseccount of another Acid Rain until at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of suffur dioxide for the previous calendar year from the unit; and

 (ii) Comply with the applicable Acid Rain emissions limitations for suffur dioxide.

 (2) Each ton of suffur dioxide emitted in excess of the Acid Rain emissions limitations for suffur 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 suffur dioxide requirements as follows:

 (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or

 (i) 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

- Frogram.

 (5) An allowance shall not be deducted in order to comply with the requirements under puregraph (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 low shall be construed to limit the authority of the United States to terminate or limit such authoritzation.

 (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 cable Acid Rein emissions limitation for nitrogen code

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rein 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 Ackl Rain unit that has excess emissions in any calendar year shalt.
 (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 Rein unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 82-214-350, 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 recordisceping, 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;

DEP Form No. 62-210.900(1)(a) -- Form

Effective: 3/16/08

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Brandy Branch	 	
Plant Name (from STEP 1)	 	

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rath Part application and any other submission under the Acid Rath Program or to nstrate 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 examption 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 fates, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal entercoment 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
- (4) Each Acid Rein source and each Acid Rein unit shall meet the requirements of the Acid Rein Program.
- (b) 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.
- 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.

 (8) 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 if repowering extension plans) and 40 CFR 78.11 (NO, 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 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 operators or the designated representative.
- rator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.6 shall be

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extern applicable, the designated representative of an Acid Rain source or Acid Rain ruin from compliance with any other provision of the Act, including the provisions of title I of the Act inlating to applicable National Ambient Air Custify 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
- (2) Limiting the interview of augustices a unit can have, provided, that he induce to augusticas retail by the full state an anget the sources 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 regulation, or limiting such state regulation, including any produces review requirements under such state law;

 (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulation Commission under the Federal Power Act or, thereforing 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 discrams on the combustion unit's configuration.

in column "h" enter the hours.

f	9	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
	_	
_		

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3

	Brandy Branch		7	3			
	Plent Name (from STEP 1)						
STEP 5	1		k	ı	m	n	
For SO ₂ Opt-in units only.			<u> </u>				
(Not required for SO ₂ Opt-In renewal applications.)	Unit (D#	Baseline or Alternative Baseline under 40 CFR 74.20	Actual SO ₂ Emissions Rate under 40 CFR 74.22	Allowable 1985 SO ₂ Emissions Rate under 40 CFR 74.23	Current Allowable SOz Emissions Rate under 40 CFR 74.24	Current Promutgated SO ₂ Emissions Rate under 40 CFR 74.25	
the unit ID# for every SO ₂ Opt-in		(ಗ್ರಾಗಿಶಿಕ್ಕು)	(lbs/mmBku)	(lbs/mmBtu)	(lbs/mm8tu)	(libs/mm8tu)	
unit identified in column "a" (and in column "f").							
For columns "j" through "n," enter						<u> </u>	
the information required under 40							
CFR 74.20-74.25 and attach all					· · · · · · · · · · · · · · · · · · ·		
supporting documentation							
required by 40 CFR 74.20-74.25.							
STEP 6 For SO ₂ Opt-in units only. Attach additional requirements, cartify and sign.	A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached. B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74. C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14. D. Attach a complete compliance plan for SO2 under 40 CFR 72.40. E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b). F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Pat 74, Subpert C, reflects actual operations of the combustion source and has not been adjusted in any way."						
	Signature			Date			
STEP 7 Read the certification statement; provide name, title, owner company name.	Certification (for designated representative or alternate designated representative only) I am suthorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am famility with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information are to the best of my knowledge and belief true, accurate, and complete. I am aware that the significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of imprisonment.						
phone, and e-mail address; sign, and	Michael Brost			ce President, Electric Systems			
date.	JEA Owner Company Na	eme	<u> </u>	lte			
	(904) 665-7547 Phone		brosmj@jea.com E-mail address				
	Signature \\ Date 5-6-08						

DEP Form No. 62-210.900(1)(a) – Form Effective: 3/16/08 ATTACHMENT BB-EU1-IV3

ALTERNATIVE METHODS OF OPERATION

May 2013 123-87691

ATTACHMENT BB-EU1-IV3 ALTERNATIVE METHODS OF OPERATION

Emissions Unit 001 (Simple-Cycle Combustion Turbine-Electrical Generator) can burn natural gas and No. 2 or superior grade of fuel oil (<0.05% sulfur content). The emission unit may operate for up to 4,750 hours/year, of which 750 hours of operation per combustion turbine may be while firing fuel oil. The turbine is limited to 16 hours per day of fuel oil firing.



EMISSIONS UNIT INFORMATION Section [2]

CT No. 2 and 3

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application - Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [2] CT No. 2 and 3

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

	1.	_	gulated Emissions Unit air operation permit. Single only.)		_	
		⊠ The emissions emissions unit		missions Unit Informati	on Section is a regulated	
		☐ The emissions unregulated en	unit addressed in this Entire in this Entire in the Entire	missions Unit Informati	on Section is an	
	<u>En</u>	nissions Unit Descr	ription and Status			
	1.	Type of Emissions	Unit Addressed in this	Section: (Check one)		
			s Unit Information Secti			
		• .	or production unit, or ac	•		
		•	which has at least one d	•		
			s Unit Information Section roduction units and activities		e emissions unit, a group	
		•	vent) but may also prod		one definable emission	
		☐ This Emissions	s Unit Information Secti	on addresses, as a single	e emissions unit, one or	
					fugitive emissions only.	
ĺ	2.		issions Unit Addressed			
			as Combustion Turbine - oplementary fired HRSG.		figured as a combined	
		Unit 3 - 170 MW Ga	as Combustion Turbine -	- Electric Generator con	figured as a combined	
ŀ			oplementary fired HRSG. entification Number: 00			
ŀ	$\frac{3.}{4}$		•		7 Fusiasiana Hait	
١	4.	Emissions Unit Status Code:	5. Commence Construction	6. Initial Startup Date:	7. Emissions Unit Major Group	
١		Status Code.	Date:	Date.	SIC Code:	
		A	10/15/2002	11/27/2004	49	
Ì	8.	Federal Program A	applicability: (Check all	that apply)	•	
ı		Acid Rain Unit	t			
l		☐ CAIR Unit				
l	9.	Package Unit:				
		Manufacturer: Gei		Model Number:	GE PG 7241 FA	
ļ				_		
	10. Generator Nameplate Rating: 170 MW 11. Emissions Unit Comment: Each emission unit is a General Electric (GE) Model PG 7241 FA combustion turbine with heat recovery steam generators with duct firing providing steam to a shared 200-MW steam turbine generator set.					

Section [2] CT No. 2 and 3

1.	Control Equipment/Method Description:
	Dry Low NOx Combustor
2.	Control Device or Method Code: 205
Em	nissions Unit Control Equipment/Method: Control 2 of 3
1.	Control Equipment/Method Description:
	Water injection used to control NOx when firing fuel oil.
2.	Control Device or Method Code: 028
<u>Em</u>	nissions Unit Control Equipment/Method: Control 3 of 3
1.	Control Equipment/Method Description:
	Selective Catalytic Reduction (SCR)
2.	Control Device or Method Code: 139
<u>E</u> m	issions Unit Control Equipment/Method: Control of
1.	Control Equipment/Method Description:
$\lceil 2 \rceil$	Control Device or Method Code:

Section [2] CT No. 2 and 3

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Through	nput Rate:	-	
2. Maximum Production Rate:			
3. Maximum Heat Input Rate: 3	,822 million Btu/hr (HHV) (Nat ,120 million Btu/hr (HHV) (Fue	~ ;	
Duct Burner 4	00 million Btu/hr (HHV) (Natur	al gas firing)	
4. Maximum Incineration Rate:	pounds/hr		
	tons/day		
5. Requested Maximum Operation	ng Schedule:		
Natural Gas Firing	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year	
Fuel Oil (0.05% S) firing	16 hours/day 52 weeks/year	7 days/week 576 hours/year	
Lower sulfur fuel oil firing (0.0065%)	24 hours/day 52 weeks/year	7 days/week 1,478 hours/year	
Duct Burner natural gas firing	24 hours/day 7 days/wee 52 weeks/year 4,500 hours		
6. Operating Capacity/Schedule	Comment:		
Maximum heat input rate for ea Natural gas 1,911 MMB1 Fuel Oil 2,060 MMB1	u/hr (HHV)		

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EMISSIONS UNIT INFORMATION Section [2]

Section [2] CT No. 2 and 3

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: EU002 an		2.	Emission Point 7	Type Code:
3.	Descriptions of Emission One 190 foot vertical cyline	drical exhaust stac	ck as	ssociated with eac	h CT/HRSG
4.	ID Numbers or Descriptio	ns of Emission Ur	nits y	with this Emission	n Point in Common:
5.	Discharge Type Code: V	Stack Height190 feet	:		7. Exit Diameter: 18.0 feet
8.	Exit Temperature: 204° F	9. Actual Volum 1,009,200 acf		ic Flow Rate:	10. Water Vapor: %
11.	Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emission Point Height: feet		
13.	Emission Point UTM Coo Zone: East (km): North (km)		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15.	Emission Point Comment:				
	Stack parameters are for each CT/HRSG and are based on Title V Permit No. 0310485-019-AV.				

Section [2] CT No. 2 and 3

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1.	Segment Description (Process/Fuel Type): Internal Combustion Engines; Electric Generation; Natural Gas; Turbine				
2.	2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units Million Cub	s: bic Feet (MMcf)	
4.	Maximum Hourly Rate: 3.75 (approx.)	5. Maximum . 30,660 (App	Annual Rate: prox)	6. Estimated Annual Activity Factor:	
7.	Maximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit: 1,020 (HHV)	
10	Segment Comment: Based on a nominal heat CT/HRSG. Maximum hourly rate = 2 u Maximum annual rate= 2 u = 30,660 MMcf/yr Duct burner nominal heat i	nits x 1,911 MMB nits x 1,785 MMB	tu/hr / 1,020 MM tu/hr / 1,020 MMI		

Se	Segment Description and Rate: Segment 2 of 2					
1.	Segment Description (Proc Internal Combustion Engin		ration; Distillate (Dil; Turbine		
2.	Source Classification Code 2-01-001-01	e (SCC):	3. SCC Units: Thousand (: Gallons Burned		
4.	Maximum Hourly Rate: 29.6 (approx.)	5. Maximum A 8,035 (appro		6. Estimated Annual Activity Factor:		
7.	Maximum % Sulfur: 0.05	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit: 139 (HHV)		
10.	limits. Actual fuel use rate	nits x 2,060 MMB nits x 1,939 MMB are provided for es are a function	tu/hr / 139 MMBt tu/hr / 139 MMBt informational pu of the fuel heat	u/Mgal = 29.6 Mgal/hr		

Section [2] CT No. 2 and 3

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

List of Tonutants Emitted by Emissions Cité						
Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant			
	Device Code		Regulatory Code			
NOX	139	205,028	EL			
СО			EL			
SO2	_		WP			
VOC	_		EL			
PM	_		EL			
PM10			EL			
	,					
			,			
	Pollutant Emitted NOX CO SO2 VOC PM	Pollutant Emitted 2. Primary Control Device Code NOX 139 CO SO2 VOC PM PM10	Pollutant Emitted 2. Primary Control Device Code NOX 139 205,028 CO SO2 VOC PM PM10			

POLLUTANT DETAIL INFORMATION Page [1] of [5] NOX

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:	2. Total Percent Efficiency of Control:				
3. Potential Emissions:		Synthetically Limited? ☑ Yes ☐ No			
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year					
6. Emission Factor: 3.5 ppmvd corrected to 15 15 ppmvd corrected to 15	% O2 (oil)	7. Emissions Method Code: 0			
Reference: Permit No. 0310485-003-AC/PSD-FL-	<u> </u>				
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-m	onth Period:			
tons/year	From:	To:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Mon	itoring Period:			
tons/year	5 years	☐ 10 years			
Hourly NOx emission rates for combined cycle operation (each CT/HRSG): Natural gas = 24.95 lb/hr (@ 20°F w/o duct burner) and 23.92 lb/hr @ 59°F (w/duct burner) Fuel oil = 119.37 lb/hr max (@20°F) and 112.41 @ 59°F (w/o duct burner) Potential Annual Emissions: Potential annual emissions are based on the operation at 100% load and 59°F and the maximum allowable hours of lower sulfur fuel oil (0.0065% sulfur) firing for Unit 2 and Unit 3 combined of 1,478 hours per consecutive 12-month period. Annual emissions = 2 units x [(23.92 lb/hr)x(8,021 hr/yr) + (112.41 lb/hr) x (739 hr/yr)] / 2,000 lb/ton = 274.9 TPY					
2 units x [(23.92 lb/hr)x(8,021 hr/yr) + (112.41 ll 11. Potential, Fugitive, and Actual Emissions Co	, , , , , , , , , , , , , , , , , , , ,	000 lb/ton = 274.9 TPY			

POLLUTANT DETAIL INFORMATION Page [1] of [5]

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 A	Allowable	Emissions '	1 of 2
-----------------------	-----------	-------------	--------

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Da Emissions:	te of Allowable
3.	Allowable Emissions and Units:	4.	. Equivalent Allowable Emissions:	
	3.5 ppmvd @ 15% O2 on a 3 hour block average		50 lb/hour	218.6 tons/year
5.	Method of Compliance: CEMS			
6.	Allowable Emissions Comment (Description The allowable emissions level in field 3 applie No. PSD-FL-310. The lb/hr and TPY equivale provided for informational purposes only and	s wi	nen firing natural gas. mission rates are for	

Allowable Emissions 2 of 2

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Emissions:	of Allowable
3.	Allowable Emissions and Units: 15.0 ppmvd@15% O2 on a 3-hour block average	4.	Equivalent Allowable I 238.7 lb/hour	Emissions: 88.2 tons/year
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description The allowable emissions level in field 3 app No. PSD-FL-310. The pound per hour and to two units and are provided for informational provided for information and pr	lies n pe	when firing fuel oil. Bar year equivalent emission	on rates are for

Allowable Emissions of

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

POLLUTANT DETAIL INFORMATION
Page [2] of [5]

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

Totential, Estimated Fugitive, and Dasenne & Frojected Actual Emissions				
Pollutant Emitted: CO	2. Total Perc	ent Efficie	ency of Control:	
3. Potential Emissions:	1	4. Syntl	netically Limited?	
144.8 lb/hour 490.3	tons/year		es <u> </u>	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year				
6. Emission Factor: 14 ppmvd @ 15% O2			7. Emissions Method Code:	
Reference: Permit Nos. 0310485-006-AC and 031	10485-003-AC		0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:	
tons/year	From:	T	o:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:	
tons/year	☐ 5 year	rs 🗌 10	0 years	
10. Calculation of Emissions: Highest hourly emissions for combined cycle operations (each CT/HRSG): Natural gas = 62.57 lb/hr @ 95°F and 54.87 lb/hr @ 59°F (w/duct burner) Fuel Oil = 72.43 lb/hr @ 20°F and 67.86 lb/hr @ 59°F (w/o duct burner) Potential annual emissions are based on operation at 100% load and 59 F and the maximum allowable hours of lower sulfur fuel oil (0.0065% sulfur) firing for Unit 2 and Unit 3 combined w/ 1,478 hours per consecutive 12-month period. Annual emissions = 2 units x [(54.87 lb/hr) x (8,021 hr/yr) + (67.86 lb/hr) x (739 hr/yr)] / 2,000 lb/ton = 490.3 TPY				
11. Potential, Fugitive, and Actual Emissions Comment: The potential hourly and annual emissions are for informational purposes only and do not constitute limits.				

POLLUTANT DETAIL INFORMATION Page [2] of [5] CO

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.

<u>Al</u>	lowable Emissions Allowable Emissions 1 o	f <u>1</u>			
1.	Basis for Allowable Emissions Code: OTHER	Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units: 14.0 ppmvd @15% O2 on a 24 hour block average	4. Equivalent Allowable Emissions: 144.8 lb/hour 490.3 tons/year			
5.	Method of Compliance: CEMS				
6.	6. Allowable Emissions Comment (Description of Operating Method): The allowable emissions level in field 3 applies when firing natural gas or fuel oil. Based on Permit No. PSD-FL-310. The Ib/hr and TPY equivalent emission rates are for two units and are provided for informational purposes only and do not constitute limits.				
<u>Al</u>	lowable Emissions Allowable Emissions	of			
1.	Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year			
5.	Method of Compliance:				
6.	Allowable Emissions Comment (Description	of Operating Method):			
Al	lowable Emissions Allowable Emissions of				
1.	Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year			
5.	Method of Compliance:				
6.	6. Allowable Emissions Comment (Description of Operating Method):				

POLLUTANT DETAIL INFORMATION
Page [3] of [5]
VOC

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 otential, Estimated Fugitive, and Daseime & 1 tojected Actual Emissions				
Pollutant Emitted: VOC	2. Total Perc	ent Efficie	ency of Control:	
3. Potential Emissions:		4. Synth	netically Limited?	
	tons/year	×Ν	•	
	•			
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year				
6. Emission Factor: 6.81 lb/hr (NG)			7. Emissions	
7.68 lb/hr (Oil)			Method Code:	
Reference: Permit Nos. 0310485-006-AC and 03	10485-003-AC		0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:	
tons/year	From:	T	o:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:	
tons/year	☐ 5 yea	rs 🔲 10	0 years	
10. Calculation of Emissions:				
Hourly VOC emission rates for combined cycle cycle operation (each CT/HRSG): Natural gas = 6.81 lb/hr @ 95°F and 4.05 lb/hr @ 59°F (w/duct burner) Fuel Oil = 7.68 lb/hr @ 59°F (w/o duct burner) Potential annual emissions = 2 units x [(6.81 lb/hr x 8,021 hr/yr) + (7.68 lb/hr x 739 hr/yr)] / 2,000 lb/ton = 60.3 TPY				
11. Potential, Fugitive, and Actual Emissions Comment: The potential hourly and annual emissions are for informational purposes only and do not constitute limits.				

POLLUTANT DETAIL INFORMATION
Page [3] of [5]

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 1 of 3

1,	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date o Emissions:	f Allowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable E	Emissions:
	6.81 lb/hr with duct burners on (per CT/HRSG)		13.62 lb/hour	30.65 tons/year
5.	Method of Compliance:		_	
	CO CEMS as a surrogate			
6.	Allowable Emissions Comment (Description	of ()perating Method):	
	The allowable emission level in Field 3 applies when firing natural gas with duct burners on. Permit No. 0310485-019-AV. Equivalent annual = 2 units x 6.81 lb/hr x 4,500 hr/yr x ton/2,000 lb = 30.65 TPY			

Allowable Emissions 2 of 3

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 4.0 lb/hr w/ duct burners off (per CT/HRSG)	4.	Equivalent Allowable Emissions: 8 lb/hour 35 tons/year
5.	Method of Compliance: CO CEMS as a surrogate		
6.	6. Allowable Emissions Comment (Description of Operating Method): The allowable emission level in Field 3 applies when firing natural gas with duct burners off. Permit No. 0310485-019-AV. Equivalent annual = 2 units x 4 lb/hr x 8,760 hr/yr x ton/2,000 lb = 35 TPY		

Allowable Emissions 3 of 3

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allov Emissions:	wable
3.	Allowable Emissions and Units: 7.68 lb/hr (per CT/HRSG)	4.	Equivalent Allowable Emission 15.36 lb/hour	ons: tons/year
5.	Method of Compliance: CO CEMS as a surrogate			
6.	Allowable Emissions Comment (Description The allowable emission level in Field 3 applied 019-AV.			310485-

POLLUTANT DETAIL INFORMATION Page [4] of [5] SO2

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

Totential, Estimated Fugitive, and Dasenne & Trojected Actual Emissions					
1. Pollutant Emitted: SO2	2. Total Percent Effici	ency of Control:			
3. Potential Emissions:	4. Synt	netically Limited?			
	tons/year 🛛 🖾 Y	es 🔲 No			
to tons/year	5. Range of Estimated Fugitive Emissions (as applicable): to tons/year				
6. Emission Factor: 0.05% sulfur oil / 2 grains/	100 scf gas	7. Emissions			
_	-	Method Code:			
Reference: 0310485-003-AC/PSD-FL-310		0			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:			
tons/year	*				
	From: T	`o:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:			
tons/year	\Box 5 years \Box 1	0 years			
tons/year					
11. Potential, Fugitive, and Actual Emissions Comment: The potential hourly and annual emissions are for two units and are for informational purposes only and do not constitute limits.					

POLLUTANT DETAIL INFORMATION
Page [4] of [5]
SO2

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 1 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Emissions:	of Allowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable	
	Firing of natural gas with 2 gr S/100 scf gas		24.2 lb/hour	106.9 tons/year
5.	Method of Compliance:			
	Fuel specification			
6.	Allowable Emissions Comment (Description Equivalent annual emissions = 2 units x 12.2 I The lb/hr and TPY equivalent rates are for purposes only and do not constitute limits.	b/hr	x 8,760 hr/yr x ton/2,000	

Allowable Emissions 2 of 4

Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: Firing of fuel oil with 0.05% S	4. Equivalent Allowable Emissions: 218.7 lb/hour 31.5 tons/year
5. Method of Compliance: Fuel specification	
6. Allowable Emissions Comment (Description The Ib/hr and TPY equivalent emission rainformational purposes only and do not cons	ates are for two units and are given for

Allowable Emissions 3 of 4

	Basis for Allowable Emissions Code: DTHER	2.	Future Effective Date of Allowable Emissions:
	Allowable Emissions and Units: 0.0065% sulfur, by weight in the fuel oil	4.	Equivalent Allowable Emissions: 28.4 lb/hour 9.9 tons/year
	Method of Compliance: Fuel specification		
Ti in	6. Allowable Emissions Comment (Description of Operating Method): The lb/hr and TPY equivalent emission rates are for two units and are given for informational purposes only and do not constitute limits. Equivalent annual = 2 units x 13.39 lb/hr x 739 hr/yr x ton/2,000 lb = 9.9 TPY.		

POLLUTANT DETAIL INFORMATION
Page [4] of [5]
SO2

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 Emiss	sions Allowabl	le Emissions 4 of 4

Allowable Emissions Allowable Emissions 4 of 4							
1.	Basis for Allowable Emissions Code: RULE	Future Effective Date of Allowable Emissions:					
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emission	ons:			
	0.8% sulfur, by weight, in the fuel oil		lb/hour	tons/year			
5.	Method of Compliance: Fuel specification	,					
6.	Allowable Emissions Comment (Description Rule NSPS 40 CFR 60.334 (b), Subpart GG Gas Turbines			ationary			
Allowable Emissions of							
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allor Emissions:	wable			
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emission lb/hour	ons: tons/year			
5.	5. Method of Compliance:						
6.	Allowable Emissions Comment (Description	of	Operating Method):				
Al	lowable Emissions Allowable Emissions of						
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allov Emissions:	wable			
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emission lb/hour	ons: tons/year			
5.	Method of Compliance:						
6.	Allowable Emissions Comment (Description	of (Operating Method):				

POLLUTANT DETAIL INFORMATION
Page [5] of [5]
PM/PM10

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	Totellian Estimated Lagitive, and Dastine & Projected Petual Emissions							
PW/PW110	2. Total Percent Efficiency of Control:							
3. Potential Emissions:		4. Synth	netically Limited?					
124.2 lb/hour 205.8	⊠ Yes □ No							
5. Range of Estimated Fugitive Emissions (as applicable):								
to tons/year								
6. Emission Factor: 22.0 lb/hr (NG with duct b 62.1 lb/hr (Oil)	urner)		7. Emissions Method Code:					
Reference: Permit Nos. 0310485-006-AC and 0310485-003-AC								
8.a. Baseline Actual Emissions (if required): 8.b. Baseline 24-month Period:								
tons/year	From: To:							
9.a. Projected Actual Emissions (if required): 9.b. Projected Monitoring Period								
tons/year	☐ 5 years ☐ 10 years							
10. Calculation of Emissions:								
Hourly PM/PM10 emission rates for combined cycle cycle operation: Natural gas = 22.02 lb/hr @ 95°F and 20.04 lb/hr @ 59°F (w/duct burner) Natural gas = 19.8 lb/hr @ 59°F (w/o duct burner) Fuel Oil = 62.1 lb/hr @ 59°F (w/o duct burner) Potential annual emissions = 2 units x [(20.04 lb/hr x 4,500 hr/yr) + (19.8 lb/hr x 3,521 hr/yr) + (62.1 lb/hr x 739 hr/yr)] / 2,000 lb/ton = 205.8 TPY								
Fuel Oil = 62.1 lb/hr @ 59°F (w/o duct burner) Potential annual emissions = 2 units x [(20.04)	lb/hr x 4,500 hr/	yr) + (19.8						

EMISSIONS UNIT INFORMATION Section [2] CT No. 2 and 3

POLLUTANT DETAIL INFORMATION
Page [5] of [5]
PM/PM10

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 1 of 2

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Da Emissions:	te of Allowable
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions:		ole Emissions:
	22.02 lb/hr with duct burner on (per CT/HRSG)		44 lb/hour	174.5 tons/year
5.	Method of Compliance: Use of pipeline natural gas to be demonstrate	ed by	opacity.	
6.	Allowable Emissions Comment (Description The allowable emission level in field 3 apequivalent allowable emission rate is provide not constitute a limit. Equivalent annual = (19.8 lb/hr x 4,260 hr/yr)] x ton/2,000 lb = 174.5	pplie d for : 2	es when firing natur r informational purpo units x [(20.04 lb/hr	ses only and does

Allowable Emissions 2 of 2

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 62.1 lb/hr (per CT/HRSG)	1	
5.	Method of Compliance: Use of low (0.05% sulfur) or very low sulfur (0.0065% sulfur) fuel oil, to be demonstrated by opacity.		
6.	Allowable Emissions Comment (Description of Operating Method): The allowable emission level in field 3 applies when firing fuel oil. The TPY equivalent allowable emission rate is for two units and is provided for informational purposes only and does not constitute a limit. Equivalent annual = 2 units x 62.1 lb/hr x 739 hr/yr x ton/2,000 lb = 45.9 TPY		

Allowable Emissions of

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

Section [2] CT No. 2 and 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 2. Basis for Allowable Opacity: Visible Emissions Subtype: VE10 ○ Other ☐ Rule 3. Allowable Opacity: Normal Conditions: % 10 % **Exceptional Conditions:** Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: EPA Method 9 Visible Emissions Comment: The opacity limit and compliance determination requirements are included in the existing permit, Permit No. 0310485-019-AV.

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

<u>V 1</u>	Visible Emissions Emitation.				
1.	Visible Emissions Subtype:	2. Basis for Allowabl	• •		
	VE99	⊠ Rule	☐ Other		
3.	Allowable Opacity:				
	Normal Conditions:	ceptional Conditions:	100 %		
	Maximum Period of Excess Opacity Allowe	ed:	2 hr/24 hr min/hour		
4.	Method of Compliance: None				
	-				
<u> </u>	77.91.72.11.72				
5.	Visible Emissions Comment:	(400			
	Rule 62-210.700(1), F.A.C., allows for 2 hours	(120 minutes) per 24 ho	ours for startup.		
1					

Section [2] CT No. 2 and 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 3

1.	Parameter Code: EM	2.	Pollutant(s): NOX
3.	CMS Requirement:	\boxtimes	Rule
4.	Monitor Information Manufacturer: TECO		
	Model Number: 42CLS		Serial Number: 42CLS-78405-389
5.	Installation Date: 12/15/2004	6.	Performance Specification Test Date: 12/15/2004
7.	Continuous Monitor Comment: 40 CFR 75 requirement. Use of CEMS requirement.	ed b	y Permit No. 0310485-019-AV.
Co	ntinuous Monitoring System: Continuous	Mor	nitor <u>2</u> of <u>3</u>
1.	Parameter Code: EM	2.	Pollutant(s):
3.	CMS Requirement:		Rule
4.	Monitor Information Manufacturer:		
	Model Number:		Serial Number:
5.	Installation Date:	6.	Performance Specification Test Date:
7.	Continuous Monitor Comment: 40 CFR 75 requirement. Use of CEMS require	ed b	y Permit No. 0310485-019-AV.

Section [2] CT No. 2 and 3

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 3 of 3

1.	Parameter Code: EM	2. Pollutant(s): CO2
3.	CMS Requirement:	☐ Rule ☐ Other
4.	Monitor Information Manufacturer: CAI	
	Model Number: 100	Serial Number: PO3048
5.	Installation Date: 12/15/2004	6. Performance Specification Test Date: 12/15/2004
7.	Continuous Monitor Comment: 40 CFR 75 requirement. Use of CEMS requirement.	red by Permit No. 0310485-019-AV.
	ntinuous Monitoring System: Continuous	
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement:	☐ Rule ☐ Other
4.	Monitor Information Manufacturer:	
	Model Number:	Serial Number:
5.	Installation Date:	6. Performance Specification Test Date:
7.	Continuous Monitor Comment:	

Section [2] CT No. 2 and 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) Attached, Document ID: BB-EU2-11 Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-EU1-12 Previously Submitted, Date
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-EU2-14 Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: BB-EU2-I5 Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: ☐ Attached, Document ID: ☐ Test Date(s)/Pollutant(s) Tested: ☐ Previously Submitted, Date: 7/11/12 (EU002), 7/10/12 (EU003) ☐ Test Date(s)/Pollutant(s) Tested: CO, NOx, NH3, VE ☐ To be Submitted, Date (if known): ☐ Test Date(s)/Pollutant(s) Tested: ☐ Not Applicable
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: ☐ Attached, Document ID: ☐ Not Applicable

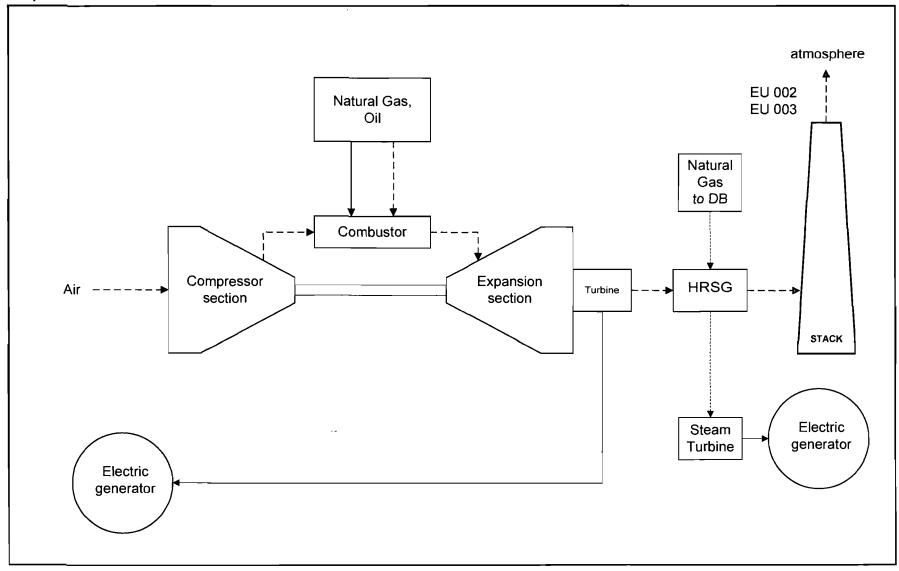
Section [2] CT No. 2 and 3

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

Γī	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)):			
	☐ Attached, Document ID: ⊠ Not Applicable			
<u> </u> _				
2.	Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-			
	212.500(4)(f), F.A.C.):			
<u></u>	☐ Attached, Document ID: ☐ Not Applicable			
3.	Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)			
	☐ Attached, Document ID: ☐ Not Applicable			
Ad	Iditional Requirements for Title V Air Operation Permit Applications			
1.	Identification of Applicable Requirements:			
2.	Compliance Assurance Monitoring: ☐ Attached, Document ID:			
3.	Alternative Methods of Operation: ☐ Attached, Document ID: BB-EU2-IV3 ☐ Not Applicable			
4.	Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ☐ Not Applicable			
Ad	ditional Requirements Comment			

ATTACHMENT BB-EU2-I1
PROCESS FLOW DIAGRAM



Attachment BB-EU2-I1
Process Flow Diagram
Brandy Branch Generating Station
Combined-Cycle Combustion Turbines-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners (EU 002/ EU 003)

Process Flow Legend
Solid/Liquid
Gas



ATTACHMENT BB-EU2-I4
PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT BB-EU2-I4 PROCEDURES FOR STARTUP AND SHUTDOWN

Startup and shutdown of combined-cycle Combustion Turbine (CT) Units 2 and 3 (EUs 002 and 003) will be completed in accordance with the manufacturer's recommended operating procedures and based on Brandy Branch Generating Station's best operation and maintenance practices since the startup of the emission unit in November 2004. The emission units will be operated following the best operational practices to comply with the requirements contained in Specific Conditions B.13 or B.15 of Title V Permit No. 0310485-019-AV, which limits excess emissions resulting from startup and shutdown.



ATTACHMENT BB-EU2-I5

OPERATION AND MAINTENANCE PLAN

ATTACHMENT BB-EU2-15 OPERATION AND MAINTENANCE PLAN

JEA will maintain and operate the combined-cycle Combustion Turbine (CT) Units 2 and 3 (EUs 002 and 003) efficiently to maximum performance and to minimize environmental emissions. JEA will take necessary actions to ensure the units do not exceed permitted limits, and will remove the units from service if required. The units will be operated under the operational guidelines as furnished by the manufacturers and JEA internal guidelines and procedures.



ATTACHMENT BB-EU2-IV3
ALTERNATIVE METHODS OF OPERATION

ATTACHMENT BB-EU2-IV3 ALTERNATIVE METHODS OF OPERATION

Emissions Units 002 and 003 [Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners] can burn any combination of natural gas (2.0 grains sulfur/100 scf), low sulfur fuel oil (0.05% sulfur content, by weight) and lower sulfur fuel oil (0.0065 sulfur content, by weight). Combustion turbine operation below 65 gross megawatts is limited to 2 hours during each calendar day. Except for the HRSG duct burners, the emission units may operate 8,760 hours per year while firing natural gas (2.0 grains sulfur/100 scf). The combined cycle units may operate up to a combined maximum of 576 actual plus "equivalent hours" per year while firing 0.05% sulfur content, by weight, fuel oil or a combined maximum of 1,478 actual plus "equivalent hours" while firing 0.0065% sulfur content, by weight, fuel oil per year, whichever occurs first. Additionally, the following requirements apply:

- a. 0.05% Sulfur Fuel Oil. In the event that any of the 3 emission units (simple or combined cycle) fires No. 2 distillate fuel oil (0.05% sulfur content, by weight) during a calendar day, that unit is limited to 16 hours of daily operation on any fuel. Additionally, the other 2 units cannot be fired on any of the allowable fuels for that calendar day.
- b. 0.0065% Sulfur Fuel Oil. In the event that the simple cycle unit fires lower sulfur oil (0.0065% sulfur content, by weight) during a calendar day, but for 8 hours or less, the combined cycle units may fire any combination of lower sulfur oil or natural gas during that calendar day.
- c. 0.0065% Sulfur Fuel Oil more than 8 hours. In the event that the simple cycle unit fires lower sulfur fuel oil (0.0065% sulfur content, by weight) during a calendar day, it may operate for 25 hours while the combined cycle units cannot be fired on any fuel for the calendar day.
- d. HRSG Duct Burners. Each HRSG duct burner operation cannot exceed 4,500 hours per consecutive 12 months.



Section [3]
Mechanical Draft Cooling Tower

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

Section [3] Mechanical Draft Cooling Tower

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 unregulated en	unit addressed in this E nissions unit.	missions Unit Inform	ation Section is an	
<u>E</u> r	nissions Unit Desc	ription and Status			
1.	Type of Emissions	S Unit Addressed in this	Section: (Check one))	
	single process	s Unit Information Secti or production unit, or ac which has at least one d	ctivity, which produce	es one or more air	
	of process or p		vities which has at lea	gle emissions unit, a group ast one definable emission as.	
				gle emissions unit, one or ce fugitive emissions only.	
2.	Description of Em Mechanical Draft C	issions Unit Addressed cooling Tower	in this Section:		
3.	Emissions Unit Ide	entification Number: 00	7		
4.	Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	
	A			49	
8.	_	Applicability: (Check al	l that apply)		
	☐ Acid Rain Unit ☐ CAIR Unit				
9.	Package Unit:	"			
	Manufacturer: Model Number:				
	Generator Namepl				
11	11. Emissions Unit Comment:				

Section [3] Mechanical Draft Cooling Tower

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description:				
Mist Eliminator – Low Velocity (v < 250 ft/min)				
2. Control Device or Method Code: 015				
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:				
1. Control Equipment Method Description.				
2. Control Device or Method Code:				
2. Control Device of Wichiod Code.				
Emissions Unit Control Equipment/Method: Control of				
1. Control Equipment/Method Description:				
2. Control Device or Method Code:				

Section [3] Mechanical Draft Cooling Tower

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

Γ.			
<u>l.</u>	Maximum Process or Through	put Rate:	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate:	million Btu/hr	
4.	Maximum Incineration Rate:	pounds/hr	
		tons/day	
5.	Requested Maximum Operation	g Schedule:	
		24 hours/day	7 days/week
		52 weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule (Comment:	-

Section [3] Mechanical Draft Cooling Tower

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: EU007	Plot Plan or	2. Emission Point 7	Гуре Code:	
3.	Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Cooling tower vents 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:				
	NA				
5.	Discharge Type Code:	6. Stack Height NA feet	:	Exit Diameter:NA feet	
8.	Exit Temperature: 77°F	9. Actual Volur NA acfm	netric Flow Rate:	10. Water Vapor: NA %	
11.	Maximum Dry Standard F NA dscfm	low Rate:	Nonstack EmissiNA feet	on Point Height:	
13.	Emission Point UTM Coo Zone: East (km): North (km)		Latitude (DD/MI	,	
North (km): Longitude (DD/MM/SS) 15. Emission Point Comment:					

Section [3] Mechanical Draft Cooling Tower

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1.	Segment Description (Process/Fuel Type): Natural Draft Cooling Towers					
2.	Source Classification Code 3-85-001-02	e (SCC):	3. SCC Units:			
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:	
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit:	
10.	10. Segment Comment:					
Seg	ment Description and Ra	te: Segment	of		·	
1.	1. Segment Description (Process/Fuel Type):					
2.	Source Classification Code (SCC): 3. SCC Units:					
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:	
7.	Maximum % Sulfur:	8. Maximum % Ash:		9.	Million Btu per SCC Unit:	
10.	Segment Comment:					

Section [3] Mechanical Draft Cooling Tower

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1 P 11 · · · F · · · · 1 2 P · · · · · · · · · · · · · · · · · ·				
1.	Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant
		Device Code	Device Code	Regulatory Code
	PM/PM10			WP
_				
		ı		
	·			
		- "		-
				-

EMISSIONS UNIT INFORMATION Section [3] Mechanical Draft Cooling Tower

POLLUTANT DETAIL	INFO	RMA	TION
Page	1	of [1

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 Occurred Detinated 1 agree of and Dascine C	t I Tojecteu Tie		
1. Pollutant Emitted:	2. Total Perc	ent Efficie	ency of Control:
3. Potential Emissions:		4. Synth	netically Limited?
lb/hour	tons/year	□ Y	es 🗌 No
5. Range of Estimated Fugitive Emissions (as	applicable):		
to tons/year			
6. Emission Factor:	-		7. Emissions
			Method Code:
Reference:			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:
tons/year	From:	T	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
tons/year	☐ 5 yea) years
10. Calculation of Emissions:			
10. Calculation of Emissions.			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

EMISSIONS UNIT INFORMATION Section [3] Mechanical Draft Cooling Tower

POLLUTANT DETAIL INFORMATION Page [] of []

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.

<u>Allowable F</u>	Emissions Allowable Emissions	<u> </u>	of			
1. Basis for	Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:			
3. Allowab	le Emissions and Units:	4.	Equivalent Allowable Emissions:			
			lb/hour tons/year			
5. Method	of Compliance:					
6. Allowab	6. Allowable Emissions Comment (Description of Operating Method):					
Allowable E	Emissions Allowable Emissions	c	of			
1. Basis for	Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:			
3. Allowab	le Emissions and Units:	4.	Equivalent Allowable Emissions: 1b/hour tons/year			
5. Method o	of Compliance:					
6. Allowable Emissions Comment (Description of Operating Method):						
Allowable E	Emissions Allowable Emissions	c	of			
1. Basis for	Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:			
3. Allowab	le Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year			
	of Compliance:					
6. Allowabl	le Emissions Comment (Description	of (Operating Method):			

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G. VISIBLE EMISSIONS INFORMATION

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

Vi	sible Emissions Limitation: Visible Emissi	ons Limitation of	
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other	er
3.	Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allowe	sceptional Conditions: ed:	% min/hour
4.	Method of Compliance:		
5.	Visible Emissions Comment:		
Vis	sible Emissions Limitation: Visible Emission	ons Limitation of	
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other	er
3.	Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	ceptional Conditions:	% min/hour
4.	Method of Compliance:		
5.	Visible Emissions Comment:		

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

\mathbf{c}	Continuous Monitoring System: Continuous Monitor of				
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement:	☐ Rule ☐ Other			
4.	Monitor Information Manufacturer:				
	Model Number:	Serial Number:			
5.	Installation Date:	6. Performance Specification Test Date:			
7.	Continuous Monitor Comment:				
Co	Continuous Monitoring System: Continuous Monitor of				
1.	Parameter Code:	2. Pollutant(s):			
 3. 	Parameter Code: CMS Requirement:				
	CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):			
3.	CMS Requirement: Monitor Information	2. Pollutant(s):			
3.	CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s):			

Section [3] Mechanical Draft Cooling Tower

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

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

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I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1.					
	F.A.C.; 40 CFR 63.43(d) and (e)):				
	Attached, Document ID:	☐ Not Applicable			
2.	<u> </u>	nalysis (Rules 62-212.400(4)(d) and 62-			
	212.500(4)(f), F.A.C.):				
	☐ Attached, Document ID:				
3.	only)	Required for proposed new stack sampling facilities			
	Attached, Document ID:	☐ Not Applicable			
Ad	Iditional Requirements for Title V Air Op	eration Permit Applications			
1.	Identification of Applicable Requirements:				
2.	Compliance Assurance Monitoring: Attached, Document ID:	⊠ Not Applicable			
3.	Alternative Methods of Operation: ☐ Attached, Document ID:	Not Applicable ■ Not Applicable Not Applicable			
4.	Alternative Modes of Operation (Emissions Attached, Document ID:	- /			
Ad	Additional Requirements Comment				
	•				

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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