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Via Hand Delivery June 19, 2007

BUREAU OF AIR REGULATION

Mr. Jeff Koerner, PE Professional Engineer Administrator Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road, M.S. 5500 Tallahassee, Florida 32399-2400

RE: Application for Title V Permit Renewal

Florida Power Corporation dba Progress Energy Florida, Inc.

Higgins Power Plant Project 40: 1030012-005-AV

Facility ID 103Q012

Dear Mr. Koerner:

Please find enclosed four (4) copies of a permit application for renewal of the Title V permit for the Florida Power Corporation dba Progress Energy Florida, Inc. ("PEF") Higgins Power Plant.

Please let me know at (727) 820-5962, if you have any questions.

Sincerely,

Ann Quillian, PE

Senior Environmental Specialist

**Enclosures** 

cc:

David Fernandes, PEF Higgins Power Plant

Gary Robbins, PCDEM



# Department of Environmental Protection ECEIVED

# **Division of Air Resource Management**

JUN 21 2007

# APPLICATION FOR AIR PERMIT - LONG FORMEAU OF AIR REGULATION

#### I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

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

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

To ensure accuracy, please see form instructions.

<u>Ide</u>	ntification of Facility					
1.	. Facility Owner/Company Name: Florida Power Corporation dba Progress Energy Florida, Inc.					
2.	Site Name: Higgins Power Plant					
3.	Facility Identification Number: 1030012					
4.	Facility Location Street Address or Other Locator: 998 Shore Drive East					
	City: Oldsmar County: Pinellas Zip Code: 34677					
5.	Relocatable Facility?  Yes No  6. Existing Title V Permitted Facility?  Yes No					
<u>Ар</u>	plication Contact					
1.	Application Contact Name: Ann Quillian, PE					
2.	Application Contact Mailing Address					
	Organization/Firm: Progress Energy Florida, Inc.					
	Street Address: 299 First Avenue North, MAC PEF-903					
	City: St. Petersburg State: FL Zip Code: 33701					
3.	Application Contact Telephone Numbers					
	Telephone: (727) 820 - 5962 ext. Fax: (727) 820 - 5229					
4.	Application Contact Email Address: Ann.Quillian@pgnmail.com					
<u>A</u> p	plication Processing Information (DEP Use)					
1.	Date of Receipt of Application:  3. PSD Number (if applicable):					
2.	Project Number(s): 1030010-005-AV 4. Siting Number (if applicable):					

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

**Higgins Power Plant** 

### **Purpose of Application**

This application for air permit is submitted to obtain: (Check one) **Air Construction Permit** Air construction permit. Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL). Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL. **Air Operation Permit** Initial Title V air operation permit. Title V air operation permit revision. X Title V air operation permit renewal. Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required. Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required. Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing) Air construction permit and Title V permit revision, incorporating the proposed project. Air construction permit and Title V permit renewal, incorporating the proposed project. Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box: I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

#### **Application Comment**

This Title V permit application is for the renewal of Title V Permit No. 1030012-004-AV. Also note that Ernissions Unit Nos. -001, -002, and -003 (Fossil Fuel Fired Steam Generators SG 1, SG 2, and SG 3, respectively) were torn down on and therefore permanently shutdown on October 20, 2006.

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**Higgins Power Plant** 

# **Scope of Application**

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee	
-004	Combustion Turbine Peaking Unit CTP 1			
-005	Combustion Turbine Peaking Unit CTP 2			
-006	Combustion Turbine Peaking Unit CTP 3			
-007	Combustion Turbine Peaking Unit CTP 4			
-010	Fuel Storage Tanks			
7775047/-001	Relocatable Diesel Generator			
_				
-				

	<u> </u>
<b>Application Processing Fee</b>	
Check one:  Attached - Amount: \$	Not Applicable

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**Higgins Power Plant** 

Signature

# Owner/Authorized Representative Statement

Co	omplete if applying for an air construction permit or an initial FESOP.
1.	Owner/Authorized Representative Name:
2.	Owner/Authorized Representative Mailing Address
	Organization/Firm:
	Street Address:
	City: State: Zip Code:
3.	Owner/Authorized Representative Telephone Numbers
	Telephone: () - ext. Fax: () -
4.	Owner/Authorized Representative Email Address:
5.	Owner/Authorized Representative Statement:
	I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

Date

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**Higgins Power Plant** 

### **Application Responsible Official Certification**

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

1.	Application Responsible Official Name: David Fernandes
2.	Application Responsible Official Qualification (Check one or more of the following options, as applicable):
	For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
	For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
	For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
	The designated representative at an Acid Rain source.
3.	Application Responsible Official Mailing Address
	Organization/Firm: Florida Power Corporation dba Progress Energy Florida, Inc.
	Street Address: 299 First Avenue North, MAC BP44
	City: Saint Petersburg State: FL Zip Code: 33701
4.	Application Responsible Official Telephone Numbers Telephone: (727) 827 - 6235 ext. Fax: (727) 827 - 6237
5.	Application Responsible Official Email Address:
6.	Application Responsible Official Certification:
	I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

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

# APPLICATION INFORMATION Higgins Power Plant

	ofessional Engineer Certification  Professional Engineer Name: Ann M Quillian				
	Registration Number: 047610				
2.	Professional Engineer Mailing Address				
	Organization/Firm: Progress Energy Florida, Inc.				
	Street Address: 299 First Avenue North, MAC PEF-903				
	City: St. Petersburg State: FL Zip Code: 33701				
3.	Professional Engineer Telephone Numbers				
	Telephone: (727) 820 - 5962 ext. Fax: (727) 820 - 5229				
4.	Professional Engineer Email Address:				
	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 $X$ , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance 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				
(e)	all provisions contained in such permit.  6-14-07				
S. B.	Signatures Date				
•	(seal) 47010 = =================================				
<b>*</b> A	attach any exception fo certification statement.				
DE Eff	EP F&TMTN6.F62-210.900(1) - Form  6ctive:22/2706				
1,	SIONAL ENGINE				

### A. GENERAL FACILITY INFORMATION

### **Facility Location and Type**

	dinates (km) 336.5 th (km) 3098.4	2. Facility Latitude/Lo Latitude (DD/MM/ Longitude (DD/MM	SS) 28/00/02
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment: Emissions Unit Nos001, -002, and -003 (Fossil Fuel Fired Steam Generators SG 1, SG 2, and SG 3, respectively) were torn down on and therefore permanently shutdown on October 20, 2006. The Higgins Plant still has four (4) gas turbine peaking units (EU Nos004 through -007) in operation.			

### **Facility Contact**

1.	Facility Contact Name: Gus Schaefer	
2.	Facility Contact Mailing Address	
	Organization/Firm: Progress Energy Florida, Inc.	
	Street Address: 299 First Avenue North, MAC PEF-134	
	City: St. Petersburg State: FL Zip Code: 33701	
3.	Facility Contact Telephone Numbers:	
	Telephone: (727) 820 - 5351 ext. Fax: (727) 820 - 4611	
4.	Facility Contact Email Address: Gustave.Schaefer@pgnmail.com	

### Facility Primary Responsible Official

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

	princy princery responsible on			
1.	Facility Primary Responsible Of	fficial Name:		
2.	Facility Primary Responsible Of	ficial Mailing Address.	••	
	Organization/Firm:	J		•
	Street Address:			
	City:	State:	Zip Code:	
3.	Facility Primary Responsible Of	fficial Telephone Numb	ers	
	Telephone: ( ) - ext.	Fax: ( ) -		
4.	Facility Primary Responsible Of	fficial Email Address:		

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**Higgins Power Plant** 

### **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. X Title V Source
4. X 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:
·

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**Higgins Power Plant** 

# **List of Pollutants Emitted by Facility**

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	A	N
PM10	A	N
SO2	A	N
NOX	A	N
CO	A	N
VOC	A	N

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**Higgins Power Plant** 

### **B. EMISSIONS CAPS**

### Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to	2. Facility Wide	3. Emissions Unit ID No.s	4. Hourly Cap	5. Annual Cap	6. Basis for Emissions
Emissions	Cap	Under Cap	(lb/hr)	(ton/yr)	Cap
Cap	[Y or N]?	(if not all			
_	(all units)	units)			
					_
					-
					_
	-				
		·			
7 Facility-W	l ide or Multi-Uni	L it Emissions Cap C	omment:	<u> </u>	
, i delite, w		w Elinopions cup c			

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

**Higgins Power Plant** 

# 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: FAI-1 Previously Submitted, Date:
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID: FAI-2  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: FAI-3  Previously Submitted, Date:
<u>A</u>	dditional 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 (Rule 62-210.300(3), F.A.C.):  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: Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):  Attached, Document ID: Not Applicable
10	O. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):  Attached, Document ID: Not Applicable

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Higgins Power Plant

# **Additional Requirements for FESOP Applications**

1.	List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):						
	Attached, Document ID: Not Applicable (no exempt units at facility)						
Ac	Additional Requirements for Title V Air Operation Permit Applications						
1.	List of Insignificant Activities (Required for initial/renewal applications only):  Attached, Document ID: FAI-4  Not Applicable (revision application)						
2.	Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):  X Attached, Document ID: FAI-5						
	Not Applicable (revision application with no change in applicable requirements)						
3.	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.	<ul> <li>4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):</li> <li>Attached, Document ID:</li> <li>Equipment/Activities On site but Not Required to be Individually Listed</li> <li>Not Applicable</li> </ul>						
5.	Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only):						
	Attached, Document ID: X Not Applicable						
6.	Requested Changes to Current Title V Air Operation Permit:  X Attached, Document ID: FAI-7 Not Applicable						
Ad	Iditional Requirements Comment						
Att	Attachment FAI-7 contains the Acid Rain forms for the permanent shutdown of Emissions Unit Nos 001, -002, and -003 (Fossil Fuel Fired Steam Generators SG 1, SG 2, and SG 3, respectively) which were torn down on October 20, 2006.						

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#### 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 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 for air permit. 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 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/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. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. 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 construction permitting and insignificant emissions units 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.

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

### A. GENERAL EMISSIONS UNIT INFORMATION

### Title V Air Operation Permit Emissions Unit Classification

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.)								
<ul> <li>         ∑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.     </li> <li>         ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.     </li> </ul>								
issions Unit	Des	cription and Sta	tus					
<ul> <li>Type of Emissions Unit Addressed in this Section: (Check one)</li> <li>This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</li> <li>This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point</li> </ul>								
						•		
Description of	of Eı	missions Unit Ac	ldre	ssed in this	Sec	tion:		
bustion Turbir	ne Po	eaking Unit CTP 1						
Emissions U	nit I	dentification Nur	nbe	r: -004				
Emissions Unit Status Code: A	5.	Commence Construction Date:	6.	Initial Startup Date:	7.	Emissions Unit Major Group SIC Code: 49	8.	Acid Rain Unit? ☐ Yes ☑ No
•		ratt & Whitney			Mo	del Number		
11. Emissions Unit Comment:								
	renewal Title permit or FE The emis emissions u The emis unregulated issions Unit Type of Emis This Emi process o which has This Emi process o (stack or This Emi more proc Description of bustion Turbin Emissions Unit Status Code: A Package Unit Manufactures Generator Na	renewal Title V apermit or FESOF  The emissions unit. The emission unregulated emissions Unit Desiration Type of Emission process or	renewal Title V air operation perropermit or FESOP only.)  The emissions unit addressed emissions unit.  The emissions unit addressed unregulated emissions unit.  Issions Unit Description and States and States Unit Emissions Unit Informat process or production unit, or which has at least one definab This Emissions Unit Informat process or production units and (stack or vent) but may also process	renewal Title V air operation permit.  permit or FESOP only.)  The emissions unit addressed in the emissions unit.  The emissions unit addressed in the unregulated emissions unit.  Issions Unit Description and Status  Type of Emissions Unit Addressed in process or production unit, or active which has at least one definable emissions Unit Information process or production units and acceptance of the process or production units.  This Emissions Unit Information more process or production units and acceptance of the process or production units.  Description of Emissions Unit Addressed unit Identification Number Emissions  Unit Status  Construction  Code:  A  Package Unit:  Manufacturer: Pratt & Whitney  Generator Nameplate Rating: 37 MV  Generator Nameplate Rating: 37 MV	renewal Title V air operation permit. Skip this is permit or FESOP only.)  The emissions unit addressed in this Emission emissions unit.  The emissions unit addressed in this Emission unregulated emissions unit.  Issions Unit Description and Status  Type of Emissions Unit Addressed in this Section addressed or production unit, or activity, which which has at least one definable emission poor This Emissions Unit Information Section addressed or production units and activities who (stack or vent) but may also produce fugitive This Emissions Unit Information Section addressed or process or production units and activities who (stack or vent) but may also produce fugitive This Emissions Unit Information Section addressed or production units and activities Description of Emissions Unit Addressed in this addressed in this Dustion Turbine Peaking Unit CTP 1  Emissions Unit Identification Number: -004  Emissions 5. Commence 6. Initial Code: Date: Date: Date:  A Package Unit: Manufacturer: Pratt & Whitney  Generator Nameplate Rating: 37 MW	renewal Title V air operation permit. Skip this item permit or FESOP only.)    The emissions unit addressed in this Emissions U emissions unit.     The emissions unit addressed in this Emissions U unregulated emissions unit.     Issions Unit Description and Status	renewal Title V air operation permit. Skip this item if applying for an permit or FESOP only.)    The emissions unit addressed in this Emissions Unit Information Semissions unit.   The emissions unit addressed in this Emissions Unit Information Semissions Unit Information Semissions Unit Description and Status    Type of Emissions Unit Addressed in this Section: (Check one)   This Emissions Unit Information Section addresses, as a single emprocess or production unit, or activity, which produces one or more which has at least one definable emission point (stack or vent).   This Emissions Unit Information Section addresses, as a single emprocess or production units and activities which has at least one defistack or vent) but may also produce fugitive emissions.   This Emissions Unit Information Section addresses, as a single emmore process or production units and activities which produce fugitoescription of Emissions Unit Addressed in this Section:   Description of Emissions Unit Addressed in this Section:	renewal Title V air operation permit. Skip this item if applying for an air permit or FESOP only.)    The emissions unit addressed in this Emissions Unit Information Section emissions unit.     The emissions unit addressed in this Emissions Unit Information Section Information Information Section Information

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# EMISSIONS UNIT INFORMATION Section [1] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 1

# **Emissions Unit Control Equipment**

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

#### **EMISSIONS UNIT INFORMATION** Section [1] **[6]** of

### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughput Rate:	
2.	Maximum Production Rate:	
3.	Maximum Heat Input Rate: 566 million Btu/hr	
4.	Maximum Incineration Rate: pounds/hr	
	tons/day	
5.	Requested Maximum Operating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6.	Operating Capacity/Schedule Comment:  Maximum heat input rate is based on No. 2 fuel oil firing at 59 F. itation (per June 2002 Title V Permit Renewal Application).	It is also based on previous permit

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

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 1

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

### **Emission Point Description and Type**

<ol> <li>Identification of Point on Plot Plan or Flow Diagram: EU-004</li> </ol>	2. Emission Point Type Code: 1					
Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:     Each CTP exhausts through its own stack.						
4. ID Numbers or Descriptions of Emission Ur	nits with this Emission Point in Common:					
<ul><li>5. Discharge Type Code:</li><li>V</li><li>6. Stack Height</li><li>55 feet</li></ul>	t: 7. Exit Diameter: 15.1 feet					
8. Exit Temperature: 9. Actual Volume 1,000,000 act	metric Flow Rate: 10. Water Vapor: %					
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet					
13. Emission Point UTM Coordinates Zone: 17 East (km): 336.5 North (km): 3098.4	14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)					
North (km): 3098.4 Longitude (DD/MM/SS)  15. Emission Point Comment:						

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# Higgins Power Plant Combustion Turbine Peaking Unit CTP 1

# D. SEGMENT (PROCESS/FUEL) INFORMATION

# Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type):							
Internal Combustion Engines – Electric Generation – Distillate Oil (Diesel) - Turbine							
2. Source Classification Cod 2-01-001-01	e (SCC):	3. SCC Units: 1000 Gallor					
4. Maximum Hourly Rate: 4.101	5. Maximum 35925	Annual Rate:	6. Estimated Annual Activity Factor:				
7. Maximum % Sulfur: 0.5	8. Maximum 0.1	% Ash:	9. Million Btu per SCC Unit: 138				
1			in Title V Permit No. 1030012- ximum rate can vary depending on				
Segment Description and Ra	ite: Segment 20	of <u>2</u>					
1. Segment Description (Process/Fuel Type):							
Internal Combustion Engines – E	Internal Combustion Engines – Electric Generation – Natural Gas - Turbine						
Source Classification Code (SCC):     2-01-002-01     3. SCC Units:     Million Cubic Feet Burned							
4. Maximum Hourly Rate: 0.57	5. Maximum 4993	Annual Rate:	6. Estimated Annual Activity Factor:				
7. Maximum % Sulfur: See Comment	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 1000				
10. Segment Comment:  Maximum hourly rate per conversion of maximum heat input rate in Specific Condition B.1 of Title V Permit No. 1030012-004-AV using 1000 mmBTU/mmCF.  Maximum sulfur content is 1 grain per 100 cubic feet.							

DEP Form No. 62-210.900(1) - Form Effective: 2/2/06

### E. EMISSIONS UNIT POLLUTANTS

### List of Pollutants Emitted by Emissions Unit

	titted by Emissions Chi		
1. Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant
	Device Code	Device Code	Regulatory Code
PM			NS
PM10			NS
SO2			EL
NOX			NS
CO			NS
VOC			NS
	I	<u> </u>	

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### EMISSIONS UNIT INFORMATION Section [1] of [6] Higgins Power Plant

POLL	LUTAN	T DETA	IL INF	ORMATIO	ľ
Page	[1]	of	[1]		
Combu	ıstion Tı	urbine Pea	aking U	nit CTP 1	

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -

### POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions
Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Pollutant Emitted:     SO2	2. Total Percent Effic	iency of Control:			
3. Potential Emissions: 286 lb/hour 1253	4. Syn	thetically Limited? Yes X No			
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):				
6. Emission Factor: 1.01 x %wt S lb/mmBTU  Reference: AP42 Table 3.1-2a (4/00)		7. Emissions Method Code: 3			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-mont	h Period:			
tons/year	From:	To:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monito	ring Period:			
tons/year		years			
tons/year 5 years 10 years  10. Calculation of Emissions: Fuel Sulfur Content = 0.5 wt% as per TV Permit 1030012-004-AV Condition B.6 Maximum Heat Input Rate = 566 mmBTU/hr per TV Permit 1030012-004-AV Condition B.1 Emission Factor = 1.01 x Fuel Sulfur Content [0.5 wt%] = 0.505 lb SO2/mmBTU  Potential Emissions: 566 mmBTU/hr x 0.505 lb/mmBTU = 286 lb/hr SO2 286 lb SO2/hr x 8760 hr/yr x 5 E-4 tons/lb = 1253 TPY SO2					
11. Potential, Fugitive, and Actual Emissions Comment:					

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#### **EMISSIONS UNIT INFORMATION** Section [1] of [6] **Higgins Power Plant**

POLLUTANT DETAIL INFORMATION Page [1] of [1] Combustion Turbine Peaking Unit CTP 1

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

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

Allowable Emissions Allowable Emissions 1 of	1
--	---

Basis for Allowable Emissions Code:     OTHER	2. Future Effective Date of Allowable Emissions:				
3. Allowable Emissions and Units: Fuel Oil Sulfur Content 0.5 wt%	4. Equivalent Allowable Emissions: 286 lb/hour 1253 tons/year				
5. Method of Compliance: Fuel oil sulfur content analysis					
6. Allowable Emissions Comment (Description Existing requirement in TV Permit No. 103001	· · · · · · · · · · · · · · · · · · ·				
Allowable Emissions Allowable Emissions	_ of				
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:				
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year				
5. Method of Compliance:					
6. Allowable Emissions Comment (Description of Operating Method):					
Allowable Emissions Allowable Emissions	_ of				
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:				
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year				
5. Method of Compliance:					
6. Allowable Emissions Comment (Description of Operating Method):					
DEP Form No. 62-210 900(1) - Form					

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 1

### G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>2</u>

1.	Visible Emissions Subtype: VE20	2. Basis for Allowable Opac	city: Other
			Other
3.	Allowable Opacity:	. 10 111	a./
		<b>1</b>	%
	Maximum Period of Excess Opacity Allowe	<b>ed:</b>	min/hour
4.	Method of Compliance: EPA Method 9		
5.	Visible Emissions Comment: Existing require	ement in TV Permit No. 1030012-	-004-AV Specific
Co	ndition B.11 and B 16. Note annual compliance \	/E test not required if burned fuel	oil for less than
400	) hours per year.		
Vis	sible Emissions Limitation: Visible Emissi	ons Limitation $\underline{2}$ of $\underline{2}$	
1.	Visible Emissions Subtype:	2. Basis for Allowable Opac	city:
	VE99	X Rule	Other
3.	Allowable Opacity:	<del>-</del>	
	Normal Conditions:	ceptional Conditions: 100	%
	Maximum Period of Excess Opacity Allowe	ed: 6	60 min/hour
4.	Method of Compliance: Best Operational Pra	actices	
	1		
			<u>_</u>
5.	Visible Emissions Comment: Existing require	ement in TV Permit No. 1030012-	-004-AV Specific
Coi	ndition B.7 for startup, shutdown or malfunctions.		

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 1

### H. CONTINUOUS MONITOR INFORMATION

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

<u>Co</u>	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:						
<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor of					
	Parameter Code:	Monitor of  2. Pollutant(s):					
1.	Parameter Code:  CMS Requirement:						
1.	Parameter Code:  CMS Requirement:  Monitor Information Manufacturer:	2. Pollutant(s):  Rule  Other					
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:	2. Pollutant(s):  Rule Other  Serial Number:					
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information Manufacturer:	2. Pollutant(s):  Rule  Other					

### H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

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

### **EMISSIONS UNIT INFORMATION**

Section [1]

of [6]

### **Higgins Power Plant** Combustion Turbine Peaking Unit CTP 1 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)  X Attached, Document ID: CTP-1 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)  X Attached, Document ID: CTP-2 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)  X Attached, Document ID: CTP-3 Previously Submitted, Date  Not Applicable (construction application)
	5.	Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID: Previously Submitted, Date Not Applicable
	6.	Compliance Demonstration Reports/Records  X Attached, Document ID: CTP-4
		Test Date(s)/Pollutant(s) Tested: May 29, 2007
		Previously Submitted, Date:
		Test Date(s)/Pollutant(s) Tested:
		To be Submitted, Date (if known):
		Test Date(s)/Pollutant(s) Tested:
		□ Not Applicable
		Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
	7.	Other Information Required by Rule or Statute  Attached, Document ID: Not Applicable

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### **EMISSIONS UNIT INFORMATION**

**Section** [1] **of** [6]

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 1

# **Additional Requirements for Air Construction Permit Applications**

F.A.C.; 40 CFR 63.43(d) and (e))  Attached, Document ID: Not Applicable  2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)  Attached, Document ID: Not Applicable  3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)  Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications  1. Identification of Applicable Requirements
<ol> <li>Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)</li></ol>
Rule 62-212.500(4)(f), F.A.C.)  Attached, Document ID: Not Applicable  3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)  Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications
<ul> <li>☐ Attached, Document ID: ☐ Not Applicable</li> <li>3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)</li> <li>☐ Attached, Document ID: ☐ Not Applicable</li> </ul> Additional Requirements for Title V Air Operation Permit Applications
<ol> <li>Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)</li></ol>
facilities only)  Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications
Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications
Additional Requirements for Title V Air Operation Permit Applications
1 Identification of Applicable Requirements
1. Idontification of Apphicable Requirements
X Attached, Document ID: FAI-5
2. Compliance Assurance Monitoring
Attached, Document ID: Not Applicable
3. Alternative Methods of Operation
☐ Attached, Document ID: CTP-5 ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
Attached, Document ID: Not Applicable
5. Acid Rain Part Application
Certificate of Representation (EPA Form No. 7610-1)
Copy Attached, Document ID:
☐ Acid Rain Part (Form No. 62-210.900(1)(a))
Attached, Document ID: Previously Submitted, Date:
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: Previously Submitted, Date:
$\square$ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: Previously Submitted, Date:
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: Previously Submitted, Date:
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID: Previously Submitted, Date:
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID: Previously Submitted, Date:

<b>EMISSIONS</b>	UNIT	INF	'ORMA'	TION
Section [1]		Ωf	[6]	

Higgins Power Plant Combustion Turbine Peaking Unit CTP 1

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#### 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 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 for air permit. 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 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/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. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. 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 construction permitting and insignificant emissions units 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.

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 2

### 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.)								
	<ul> <li>☑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</li> <li>☑ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</li> </ul>								
En	nissions Unit	Des	cription and Sta	ıtus					
1.									
							ses, as a single em which produce fugi		
2.	Description of	of E	missions Unit Ac	ldre	ssed in this	s Sec	tion:		
Co	mbustion Turbir	ne P	eaking Unit CTP 2						
3.	Emissions U	nit I	dentification Nu	mbe	r: -005				
	Emissions Unit Status Code: A		Commence Construction Date:	6.	Initial Startup Date:	7.	Emissions Unit Major Group SIC Code: 49	8.	Acid Rain Unit?  Yes  No
9.	Package Unit Manufacture		ratt & Whitney			Mο	del Number:		
10.				MV	V	1,10	der i vanioer.		
	10. Generator Nameplate Rating: 37 MW  11. Emissions Unit Comment:								

# EMISSIONS UNIT INFORMATION Section [2] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 2

### **Emissions Unit Control Equipment**

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

### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughput Rate:	•
2.	Maximum Production Rate:	
3.	Maximum Heat Input Rate: 566 million Btu/hr	
4.	Maximum Incineration Rate: pounds/hr	
	tons/day	
5.	Requested Maximum Operating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6.	Operating Capacity/Schedule Comment:  Maximum heat input rate is based on No. 2 fuel oil firing at 59 F. nitation (per June 2002 Title V Permit Renewal Application).	It is also based on previous permit

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

### **Emission Point Description and Type**

Identification of Point on Flow Diagram: EU-005	Plot Plan or	2. Emission Point 7	Type Code:
Descriptions of Emission     Each CTP exhausts through		g this Emissions Unit	for VE Tracking:
4 IDM Langue Desire		Mark Public	Deited Communication
4. ID Numbers or Descriptio	ns of Emission Ur	nits with this Emission	
<ol><li>Discharge Type Code:</li><li>V</li></ol>	6. Stack Height 55 feet	;	7. Exit Diameter: 15.1 feet
8. Exit Temperature: 850 °F	9. Actual Volum 1,000,000 ac	netric Flow Rate: fm	10. Water Vapor: %
11. Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13. Emission Point UTM Coo Zone: 17 East (km):	336.5	Latitude (DD/MI	· · · · · · · · · · · · · · · · · · ·
North (km) 15. Emission Point Comment		Longitude (DD/N	MM/SS)

Section [2]

of [6]

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 2

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

Segment	Description	and Rate:	Segment 1	of	2

1. Segment Description (Process/Fuel Type):

Internal Combustion Engines – Electric Generation – Distillate Oil (Diesel) - Turbine						
2. Source Classification Code	e (SCC):	3. SCC Units:				
2-01-001-01	(	1000 Gallon				
4. Maximum Hourly Rate: 4.101	5. Maximum <i>a</i> 35925	Annual Rate:	6. Estimated Annual Activity Factor:			
7. Maximum % Sulfur: 0.5	8. Maximum 6	% Ash:	9. Million Btu per SCC Unit: 138			
· · ·	Maximum hourly rate per conversion of maximum heat input rate in Title V Permit No. 1030012-004-AV Specific Condition B.1 using 138 mmBTU/Kgallons. Note maximum rate can vary depending on					
Segment Description and Ra	te: Segment 20	of <u>2</u>	-			
Segment Description (Process/Fuel Type):  Internal Combustion Engines – Electric Generation – Natural Gas - Turbine						
2. Source Classification Code 2-01-002-01						
4. Maximum Hourly Rate: 0.57	5. Maximum . 4993	Annual Rate:	6. Estimated Annual Activity Factor:			
7. Maximum % Sulfur: See Comment	8. Maximum (	% Ash:	9. Million Btu per SCC Unit: 1000			
10. Segment Comment:  Maximum hourly rate per conversion of maximum heat input rate in Specific Condition B.1 of Title V  Permit No. 1030012-004-AV using 1000 mmBTU/mmCF.  Maximum sulfur content is 1 grain per 100 cubic feet.						

### E. EMISSIONS UNIT POLLUTANTS

### List of Pollutants Emitted by Emissions Unit

Dist of Fondants Emitted by Emissions Chit				
1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code	
PM			NS	
PM10			NS	
SO2			EL	
NOX			NS	
CO			NS	
VOC			NS	

EMISSIONS UNIT INFORMATION Section [2] of [6] Higgins Power Plant POLLUTANT DETAIL INFORMATION
Page [1 ] of [1 ]
Combustion Turbine Peaking Unit CTP 2

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -

### POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions
Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:			
3. Potential Emissions:	4. Synthetically Limited?			
286 lb/hour 1253	3 tons/year [	Yes X No		
5. Range of Estimated Fugitive Emissions (as applicable):				
to tons/year				
6. Emission Factor: 1.01 x %wt S lb/mmBTU		7. Emissions		
		Method Code:		
Reference: AP42 Table 3.1-2a (4/00)		3		
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:  Fuel Sulfur Content = 0.5 wt% as per TV Permit 1030012-004-AV Condition B.6  Maximum Heat Input Rate = 566 mmBTU/hr per TV Permit 1030012-004-AV Condition B.1  Emission Factor = 1.01 x Fuel Sulfur Content [0.5 wt%] = 0.505 lb SO2/mmBTU  Potential Emissions:  566 mmBTU/hr x 0.505 lb/mmBTU = 286 lb/hr SO2  286 lb SO2/hr x 8760 hr/yr x 5 E-4 tons/lb = 1253 TPY SO2				
11. Potential, Fugitive, and Actual Emissions Comment:				

# EMISSIONS UNIT INFORMATION Section [2] of [6] Higgins Power Plant

POLLUTANT DETAIL INFORMATION
Page [1 ] of [1 ]
Combustion Turbine Peaking Unit CTP 2

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:				
3.	Allowable Emissions and Units: Fuel Oil Sulfur Content 0.5 wt%	4. Equivalent Allowable Emissions: 286 lb/hour 1253 tons/year				
5.	Method of Compliance: Fuel oil sulfur content analysis					
6.	Allowable Emissions Comment (Description Existing requirement in TV Permit No. 1030012-	- · · · · · · · · · · · · · · · · · · ·				
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.	Allowable Emissions Comment (Description	n 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):					

## Higgins Power Plant Combustion Turbine Peaking Unit CTP 2

#### G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>2</u>

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE20	
3. Allowable Opacity:	
Normal Conditions: 20 % Ex	cceptional Conditions:
Maximum Period of Excess Opacity Allowe	ed: min/hour
4. Method of Compliance: EPA Method 9	
·	
5. Visible Emissions Comment: Existing require Condition B.11 and B.16. Note annual compliance V 400 hours per year.	•
Visible Emissions Limitation: Visible Emission	ons Limitation 2 of 2
Visible Emissions Subtype:     VE99	2. Basis for Allowable Opacity:  X Rule  Other
3. Allowable Opacity:	
	cceptional Conditions: 100 %
Maximum Period of Excess Opacity Allowe	
4. Method of Compliance: Best Operational Pra	actices
5. Visible Emissions Comment: Existing require Condition B.7 for startup, shutdown or malfunctions.	ement in TV Permit No. 1030012-004-AV Specific

### EMISSIONS UNIT INFORMATION Section [2] of [6]

Higgins Power Plant Combustion Turbine Peaking Unit CTP 2

#### H. CONTINUOUS MONITOR INFORMATION

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

	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:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor of
1.	Parameter Code:	2. Pollutant(s):
3.	Parameter Code:  CMS Requirement:	2. Pollutant(s):  Rule Other
3.	CMS Requirement:  Monitor Information	
3.	CMS Requirement:  Monitor Information  Manufacturer:	Rule Other
3.	CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	Rule Other  Serial Number:
3. 4.	CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	Rule Other  Serial Number:
3. 4.	CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	Rule Other  Serial Number:
3. 4.	CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	Rule Other  Serial Number:

### EMISSIONS UNIT INFORMATION

Section [2] of [6]

### Higgins Power Plant Combustion Turbine Peaking Unit CTP 2

### H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

<u>C</u> 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:			
1.	Continuous Monitor Comment:				
<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor of			
$\overline{}$	Parameter Code:  Continuous Monitoring System: Continuous	Monitor of  2. Pollutant(s):			
_					
1.	Parameter Code:  CMS Requirement:  Monitor Information Manufacturer:	2. Pollutant(s):  Rule  Other			
3.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:	2. Pollutant(s):  Rule Other  Serial Number:			
3.	Parameter Code:  CMS Requirement:  Monitor Information Manufacturer:	2. Pollutant(s):  Rule  Other			

### **EMISSIONS UNIT INFORMATION**

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 2

Section [2] of [6]

#### 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)  X Attached, Document ID: CTP-1 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)  X Attached, Document ID: CTP-2 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)  X Attached, Document ID: CTP-3 Previously Submitted, Date  Not Applicable (construction application)
5.	Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID: Previously Submitted, Date  Not Applicable
6.	Compliance Demonstration Reports/Records  Attached, Document ID:  Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date:  Test Date(s)/Pollutant(s) Tested:
	To be Submitted, Date (if known):  Test Date(s)/Pollutant(s) Tested: VE (on oil) – See FAI-6
	☐ 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

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## EMISSIONS UNIT INFORMATION Section [2] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 2

**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 Analysis (Rule 62-212.400(4)(d), F.A.C., and
	Rule 62-212.500(4)(f), F.A.C.)
	Attached, Document ID: Not Applicable
3.	Description of Stack Sampling Facilities (Required for proposed new stack sampling
	facilities only)
	Attached, Document ID: Not Applicable
Ad	Iditional Requirements for Title V Air Operation Permit Applications
1.	Identification of Applicable Requirements
	X Attached, Document ID: FAI-5
2. 0	Compliance Assurance Monitoring
	Attached, Document ID: Not Applicable
3.	Alternative Methods of Operation
	X Attached, Document ID: CTP-5 Not Applicable
4.	Alternative Modes of Operation (Emissions Trading)
	Attached, Document ID: Not Applicable
5.	Acid Rain Part Application
	Certificate of Representation (EPA Form No. 7610-1)
	Copy Attached, Document ID:
	Acid Rain Part (Form No. 62-210.900(1)(a))
	Attached, Document ID: Previously Submitted, Date:
	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
	Attached, Document ID: Previously Submitted, Date:
	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
	Attached, Document ID: Previously Submitted, Date:
]	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
	Attached, Document ID: Previously Submitted, Date:
	Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
	Attached, Document ID: Previously Submitted, Date:
	Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
	Attached, Document ID: Previously Submitted, Date:
	X Not Applicable

<b>EMISSI</b>	ONS	UNIT	INF	'ORMA'	TION
Section	[2]		of	[6]	

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 2

Additional Requirements Comment				

#### 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 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 for air permit. 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 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/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. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. 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 construction permitting and insignificant emissions units 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.

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 3

### A. GENERAL EMISSIONS UNIT INFORMATION

### Title V Air Operation Permit Emissions Unit Classification

1.	Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)								
	emissions t	ınit. sion					Jnit Information S Jnit Information S		
<u>En</u>	nissions <u>U</u> nit	Des	cription and Sta	ıtus					
1.									
	_						ses, as a single em which produce fugi		<u>-</u>
2.	Description of	of E	missions Unit Ac	ldre	ssed in this	Sec	ction:		
Со	mbustion Turbir	ne P	eaking Unit CTP 3						
3.	Emissions U	nit I	dentification Nur	nbe	r: -006				
	Emissions Unit Status Code: A		Commence Construction Date:	6.	Initial Startup Date:	7.	Emissions Unit Major Group SIC Code: 49	8.	Acid Rain Unit? ☐ Yes ☑ No
9.	Package Unit Manufacture		ratt & Whitney			Mο	del Number:		
10.			plate Rating: 43	MV	V	1,10	der realition.		
	. Emissions Ui								

### **Emissions Unit Control Equipment**

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

Higgins Power Plant Combustion Turbine Peaking Unit CTP 3

#### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Thro	ughput Rate:	
2. Maximum Production Rate	•	
3. Maximum Heat Input Rate:	: 631 million Btu/hr	
4. Maximum Incineration Rat	e: pounds/hr	
	tons/day	
5. Requested Maximum Oper	ating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6. Operating Capacity/Schedu Maximum heat input rate is b limitation (per June 2002 Title V P	ased on No. 2 fuel oil firing at 59 F.	It is also based on previous permit

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

### **Emission Point Description and Type**

Identification of Point on Plot Plan o     Flow Diagram: EU-006	2. Emission Point Type Code: 1				
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Trackin Each CTP exhausts through its own stack.					
4. ID Numbers or Descriptions of Emis	ssion Units with this Emission Point in Common:				
5. Discharge Type Code: 6. Stack 55 fee	_				
1	al Volumetric Flow Rate: 10. Water Vapor: %				
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet				
13. Emission Point UTM Coordinates Zone: 17 East (km): 336.5 North (km): 3098.4	14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)				
15. Emission Point Comment:					

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 3

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

Segment Descripti	on and Rate:	Segment 1	of $2$

1. Segment Description (Process/Fuel Type):

Internal Combustion Engines – Electric Generation – Distillate Oil (Diesel) - Turbine					
2. Source Classification Code 2-01-001-01	e (SCC):	3. SCC Units: 1000 Gallon			
4. Maximum Hourly Rate: 4.572	5. Maximum 40055	Annual Rate:	6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur: 0.5	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit: 138		
10. Segment Comment:  Maximum hourly rate per conversion of maximum heat input rate in Title V Permit No. 1030012-004-AV Specific Condition B.1 using 138 mmBTU/Kgallons. Note maximum rate can vary depending on heating value of fuel burned.					
Segment Description and Ra	te: Segment 2 o	of <u>2</u>			
Segment Description (Process/Fuel Type):  Internal Combustion Engines – Electric Generation – Natural Gas - Turbine					
<ul> <li>Source Classification Code (SCC):</li> <li>2-01-002-01</li> <li>SCC Units:</li> <li>Million Cubic Feet Burned</li> </ul>					
4. Maximum Hourly Rate: 0.63	5. Maximum Annual Rate: 6. Estimated Annual A Factor:		6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur: See Comment	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit: 1000		
10. Segment Comment:  Maximum hourly rate per conversion of maximum heat input rate in Specific Condition B.1 of Title V Permit No. 1030012-004-AV using 1000 mmBTU/mmCF.  Maximum sulfur content is 1 grain per 100 cubic feet.					

### E. EMISSIONS UNIT POLLUTANTS

#### List of Pollutants Emitted by Emissions Unit

Elist of I officially Emissions Cite					
1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code		
	Bevice code	Bevice Code			
PM			NS		
PM10			NS		
SO2			EL		
NOX			NS		
CO			NS		
VOC			NS		
			_		
			_		
_					
			-		

#### EMISSIONS UNIT INFORMATION Section [3] of [6] Higgins Power Plant

POLLUTANT DETAIL INFORMATION
Page [1 ] of [1 ]
Combustion Turbine Peaking Unit CTP 3

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -

#### POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions
Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Pollutant Emitted:     SO2	2. Total Perce	ent Efficie	ency of Control:
3. Potential Emissions: 319 lb/hour 139	7tons/year	-	etically Limited? es 🔲 No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 1.01 x %wt S lb/mmBTU  Reference: AP42 Table 3.1-2a (4/00)			7. Emissions Method Code: 3
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 2	24-month	Period:
tons/year	From:	Γ	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:
tons/year	5 years	☐ 10 ye	ears
			endition B.1
11. Potential, Fugitive, and Actual Emissions Co	omment:		
•			

#### EMISSIONS UNIT INFORMATION Section [3] of [6] Higgins Power Plant

POLLUTANT DETAIL INFORMATION
Page [1 ] of [1 ]
Combustion Turbine Peaking Unit CTP 3

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable	<b>Emissions</b>	Allowable	<b>Emissions</b>	1 of 1

Basis for Allowable     OTHER	Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
Allowable Emission     Fuel Oil Sulfur Conter		4.	Equivalent Allowable Emissions: 319 lb/hour 1397 tons/year		
5. Method of Compliar Fuel oil sulfur content					
,	<ol> <li>Allowable Emissions Comment (Description of Operating Method): Existing requirement in TV Permit No. 1030012-004-AV Specific Condition B.9</li> </ol>				
Allowable Emissions A	Allowable Emissions	of_			
1. Basis for Allowable	Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
3. Allowable Emission	s and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year		
5. Method of Complian	nce:				
6. Allowable Emission	s Comment (Description	of (	Operating Method):		
Allowable Emissions A	Allowable Emissions	of_			
1. Basis for Allowable	Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
3. Allowable Emission	s and Units:	4.	Equivalent Allowable Emissions:  lb/hour tons/year		
5. Method of Complian	_				
6. Allowable Emission	s Comment (Description	of (	Operating Method):		

## Higgins Power Plant Combustion Turbine Peaking Unit CTP 3

#### G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>2</u>

Visible Emissions Subtype:     VE20	2. Basis for Allowable Opacity:    X Rule
3. Allowable Opacity: Normal Conditions: 20 % Ex Maximum Period of Excess Opacity Allower	acceptional Conditions: % ed: min/hour
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Existing require Condition B.11 and B 16. Note annual compliance \ 400 hours per year.	•
Visible Emissions Limitation: Visible Emissi	ons Limitation 2 of 2
Visible Emissions Subtype:     VE99	2. Basis for Allowable Opacity:  Rule  Other
3. Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	aceptional Conditions: 100 % ed: 60 min/hour
4. Method of Compliance: Best Operational Pra	actices
5. Visible Emissions Comment: Existing require Condition B.7 for startup, shutdown or malfunctions.	ement in TV Permit No. 1030012-004-AV Specific

## Higgins Power Plant Combustion Turbine Peaking Unit CTP 3

#### H. CONTINUOUS MONITOR INFORMATION

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

<u>Co</u>	ontinuous Monitoring System: Continuous	Mon	itor of
1.	Parameter Code:	2.	Pollutant(s):
3.	CMS Requirement:		Rule
4.	Monitor Information Manufacturer:		
	Model Number:		Serial Number:
5.	Installation Date:	6.	Performance Specification Test Date:
<u>C</u>	ontinuous Monitoring System: Continuous	Mon	itor of
	Parameter Code:		itor of 2. Pollutant(s):
3.	Parameter Code:  CMS Requirement:		
3.	Parameter Code:		2. Pollutant(s):
3.	Parameter Code:  CMS Requirement:  Monitor Information		2. Pollutant(s):
3.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:		2. Pollutant(s):  Rule

### EMISSIONS UNIT INFORMATION Section [3] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 3

### H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuo	us 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:	-
Continuous Monitoring System: Continuou	us Monitor of
Continuous Monitoring System: Continuou  1. Parameter Code:	us Monitor of 2. Pollutant(s):
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information</li> </ol>	2. Pollutant(s):
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information         Manufacturer:     </li> </ol>	2. Pollutant(s):  Rule Other
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information</li> </ol>	2. Pollutant(s):  Rule Other  Serial Number:
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information         Manufacturer:         Model Number:     </li> </ol>	2. Pollutant(s):  Rule Other
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information         Manufacturer:         Model Number:     </li> </ol>	2. Pollutant(s):  Rule Other  Serial Number:
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information         Manufacturer:         Model Number:</li> <li>Installation Date:</li> </ol>	2. Pollutant(s):  Rule Other  Serial Number:
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information         Manufacturer:         Model Number:</li> <li>Installation Date:</li> </ol>	2. Pollutant(s):  Rule Other  Serial Number:
<ol> <li>Parameter Code:</li> <li>CMS Requirement:</li> <li>Monitor Information         Manufacturer:         Model Number:</li> <li>Installation Date:</li> </ol>	2. Pollutant(s):  Rule Other  Serial Number:

#### **EMISSIONS UNIT INFORMATION**

**Higgins Power Plant** Combustion Turbine Peaking Unit CTP 3

Section [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)  X Attached, Document ID: CTP-1 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)  X Attached, Document ID: CTP-2 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)  X Attached, Document ID: CTP-3 Previously Submitted, Date  Not Applicable (construction application)
5.	Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID: Previously Submitted, Date  Not Applicable
6.	Compliance Demonstration Reports/Records  X Attached, Document ID: CTP-4  Test Date(s)/Pollutant(s) Tested: May 29, 2007
	Previously Submitted, Date:  Test Date(s)/Pollutant(s) Tested:
	To be Submitted, Date (if known):  Test Date(s)/Pollutant(s) Tested:
	Not Applicable
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute  Attached, Document ID: Not Applicable

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# EMISSIONS UNIT INFORMATION Section [3] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 3

**Additional Requirements for Air Construction Permit Applications** 

F.A.C.; 40 CFR 63.43(d) and (e))  Attached, Document ID: Not Applicable  2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)  Attached, Document ID: Not Applicable  3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)  Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications  1. Identification of Applicable Requirements  Attached, Document ID: FAI-5  2. Compliance Assurance Monitoring  Attached, Document ID: Not Applicable  3. Alternative Methods of Operation  X Attached, Document ID: Not Applicable  4. Alternative Modes of Operation (Emissions Trading)  Attached, Document ID: Not Applicable  5. Acid Rain Part Application  Certificate of Representation (EPA Form No. 7610-1)  Copy Attached, Document ID:  Acid Rain Part (Form No. 62-210.900(1)(a))  Attached, Document ID: Previously Submitted, Date:  Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)  Attached, Document ID: Previously Submitted, Date:  New Unit Exemption (Form No. 62-210.900(1)(a)2.)  Attached, Document ID: Previously Submitted, Date:  Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)  Attached, Document ID: Previously Submitted, Date:  Previously Submitted, Date:	
Attached, Document ID:   Not Applicable	1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)  Attached, Document ID: Not Applicable  3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)  Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications  1. Identification of Applicable Requirements  X Attached, Document ID: Not Applicable  2. Compliance Assurance Monitoring  Attached, Document ID: Not Applicable  3. Alternative Methods of Operation  X Attached, Document ID: Not Applicable  4. Alternative Modes of Operation (Emissions Trading)  Attached, Document ID: Not Applicable  5. Acid Rain Part Application  Certificate of Representation (EPA Form No. 7610-1)  Copy Attached, Document ID: Previously Submitted, Date: Previously Submitted, Date: New Unit Exemption (Form No. 62-210.900(1)(a)2.)  Attached, Document ID: Previously Submitted, Date: New Unit Exemption (Form No. 62-210.900(1)(a)3.)  Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)  Retired Unit Exemption (Form No. 62-210.900(1)(a)4.)	F.A.C.; 40 CFR 63.43(d) and (e))
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)  Attached, Document ID: Not Applicable  3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)  Attached, Document ID: Not Applicable  Additional Requirements for Title V Air Operation Permit Applications  1. Identification of Applicable Requirements  X Attached, Document ID: Not Applicable  2. Compliance Assurance Monitoring  Attached, Document ID: Not Applicable  3. Alternative Methods of Operation  X Attached, Document ID: Not Applicable  4. Alternative Modes of Operation (Emissions Trading)  Attached, Document ID: Not Applicable  5. Acid Rain Part Application  Certificate of Representation (EPA Form No. 7610-1)  Copy Attached, Document ID: Previously Submitted, Date: Previously Submitted, Date: New Unit Exemption (Form No. 62-210.900(1)(a)2.)  Attached, Document ID: Previously Submitted, Date: New Unit Exemption (Form No. 62-210.900(1)(a)3.)  Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)  Retired Unit Exemption (Form No. 62-210.900(1)(a)4.)	Attached, Document ID: Not Applicable
Attached, Document ID:   Not Applicable	2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)  Attached, Document ID:	
facilities only)  Attached, Document ID:	Attached, Document ID: Not Applicable
Additional Requirements for Title V Air Operation Permit Applications  1. Identification of Applicable Requirements	3. Description of Stack Sampling Facilities (Required for proposed new stack sampling
Additional Requirements for Title V Air Operation Permit Applications  1. Identification of Applicable Requirements	facilities only)
1. Identification of Applicable Requirements  X Attached, Document ID: FAI-5  2. Compliance Assurance Monitoring Attached, Document ID: Not Applicable  3. Alternative Methods of Operation X Attached, Document ID: CTP-5 Not Applicable  4. Alternative Modes of Operation (Emissions Trading) Attached, Document ID: Not Applicable  5. Acid Rain Part Application Certificate of Representation (EPA Form No. 7610-1) Copy Attached, Document ID: Acid Rain Part (Form No. 62-210.900(1)(a)) Attached, Document ID: Previously Submitted, Date: Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: Previously Submitted, Date: New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: Previously Submitted, Date: Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: Previously Submitted, Date: Retired Unit Exemption (Form No. 62-210.900(1)(a)4.)	Attached, Document ID: Not Applicable
X Attached, Document ID: FAl-5	Additional Requirements for Title V Air Operation Permit Applications
X Attached, Document ID: FAl-5	1. Identification of Applicable Requirements
☐ Attached, Document ID: ☐ Not Applicable   3. Alternative Methods of Operation ☐ Not Applicable   4. Alternative Modes of Operation (Emissions Trading) ☐ Attached, Document ID:   ☐ Acid Rain Part Application ☐ Certificate of Representation (EPA Form No. 7610-1)   ☐ Copy Attached, Document ID: ☐ Acid Rain Part (Form No. 62-210.900(1)(a))   ☐ Attached, Document ID: ☐ Previously Submitted, Date:   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Previously Submitted, Date:   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.) ☐ Previously Submitted, Date:   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) ☐ Previously Submitted, Date:   ☐ Previously Submitted, Date: ☐ Previously Submitted, Date:   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	
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3. Alternative Methods of Operation  Attached, Document ID: CTP-5  Not Applicable  4. Alternative Modes of Operation (Emissions Trading)  Attached, Document ID: Not Applicable  5. Acid Rain Part Application  Certificate of Representation (EPA Form No. 7610-1)  Copy Attached, Document ID:  Acid Rain Part (Form No. 62-210.900(1)(a))  Attached, Document ID: Previously Submitted, Date:  Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)  Attached, Document ID: Previously Submitted, Date:  New Unit Exemption (Form No. 62-210.900(1)(a)2.)  Attached, Document ID: Previously Submitted, Date:  Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)  Attached, Document ID: Previously Submitted, Date:  Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	
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☐ Attached, Document ID: ☐ Previously Submitted, Date: ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	Attached, Document ID: Previously Submitted, Date: Previously Submitted, Date:
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	
	Attached, Document ID: Previously Submitted, Date:
Attached Decument ID:	
Attached, Document ID: Previously Submitted, Date: Previously Submitted, Date:	Dhase II NOv Averaging Plan (Form No. 62.210.000(1)(a)5.
☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) ☐ Attached, Document ID: ☐ Previously Submitted, Date:	
Not Applicable	<del></del> -

EMISSIONS UNIT INFORMATION Section [3] of [6]	Higgins Power Plant Combustion Turbine Peaking Unit CTP 3
Additional Requirements Comment	: 

#### 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 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 for air permit. 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 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/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. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. 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 construction permitting and insignificant emissions units 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.

#### 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.)								
	<ul> <li>         ☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.     </li> <li>         ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.     </li> </ul>								
En	nissions Unit	Des	cription and Sta	itus					
1.									
	☐ This Emi	ssio	ns Unit Informat	ion	Section ad	dres	ses, as a single em		
2.	Description of	of E	missions Unit Ac	ldre	ssed in this	s Sec	tion:		
Co	mbustion Turbir	ne P	eaking Unit CTP 4						
3.	Emissions U	nit I	dentification Nur	nbe	r: -007				
	Emissions Unit Status Code: A		Commence Construction Date:	6.	Initial Startup Date:	7.	Emissions Unit Major Group SIC Code: 49	8.	Acid Rain Unit? Yes No
9.	Package Unit Manufacture		ratt & Whitney			Mο	del Number:		
10.		_	•	MV	V	1410	der ivamber.		
	10. Generator Nameplate Rating: 43 MW 11. Emissions Unit Comment:								

# EMISSIONS UNIT INFORMATION Section [4] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 4

### **Emissions Unit Control Equipment**

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

### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Th	roughput Rate:	
2. Maximum Production Ra	ate:	
3. Maximum Heat Input Ra	te: 631 million Btu/hr	•
4. Maximum Incineration R	ate: pounds/hr	
	tons/day	
5. Requested Maximum Op	erating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
limitation (per June 2002 Title V	based on No. 2 fuel oil firing at 59 F. Permit Renewal Application).	it is also based on provides pomine

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

#### **Emission Point Description and Type**

1.	Flow Diagram: EU-007		2. Emission Point	Type Code:	
	Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Each CTP exhausts through its own stack.  ID Numbers or Descriptions of Emission Units with this Emission Point in Common:				
	•				
5.	Discharge Type Code: V	6. Stack Height: 55 feet		7. Exit Diameter: 15.1 feet	
8.	Exit Temperature: 850 °F	9. Actual Volumetric Flow Rate: 1,000,000 acfm		10. Water Vapor: %	
11.	Maximum Dry Standard F dscfm	low Rate:	v Rate: 12. Nonstack Emission Point Height: feet		
13.	Emission Point UTM Coo Zone: 17 East (km): North (km)	336.5	14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15.	15. Emission Point Comment:				

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

### Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type):				
Internal Combustion Engines – Electric Generation – Distillate Oil (Diesel) - Turbine				
2 Sayras Classification Code	· (CCC).	2 SCC Units		
2-01-001-01	<ol> <li>Source Classification Code (SCC):</li> <li>2-01-001-01</li> <li>SCC Units:</li> <li>1000 Gallons Burned</li> </ol>			
4. Maximum Hourly Rate: 4.572	5. Maximum 40055	Annual Rate:	6. Estimated Annual Activity Factor:	
7. Maximum % Sulfur: 0.5	8. Maximum 0.1	% Ash:	9. Million Btu per SCC Unit: 138	
10. Segment Comment:  Maximum hourly rate per conversion of maximum heat input rate in Title V Permit No. 1030012-004-AV Specific Condition B.1 using 138 mmBTU/Kgallons. Note maximum rate can vary depending on heating value of fuel burned.				
Segment Description and Ra	te: Segment 2	of <u>2</u>		
1. Segment Description (Proc	cess/Fuel Type):			
   Internal Combustion Engines – El	lectric Generation	– Natural Gas - Tu	ırhine	
micinal combustion Engines E		ratarar Gao Te		
2. Source Classification Code 2-01-002-01				
4. Maximum Hourly Rate: 0.63	5. Maximum Annual Rate: 6. Estimated Annual Activit Factor:			
7. Maximum % Sulfur: See Comment	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 1000	
10. Segment Comment:  Maximum hourly rate per conversion of maximum heat input rate in Specific Condition B.1 of Title V  Permit No. 1030012-004-AV using 1000 mmBTU/mmCF.  Maximum sulfur content is 1 grain per 100 cubic feet.				

#### E. EMISSIONS UNIT POLLUTANTS

#### List of Pollutants Emitted by Emissions Unit

	tited by Emissions emi	·	
1. Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant
	Device Code	Device Code	Regulatory Code
PM			NS
PM10			NS
SO2			EL
NOX			NS
СО			NS
VOC			NS

#### EMISSIONS UNIT INFORMATION Section [4] of [6] Higgins Power Plant

POLLUTANT DETAIL INFORMATION
Page [1 ] of [1 ]
Combustion Turbine Peaking Unit CTP 4

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -

#### POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions
Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:				
3. Potential Emissions:			nthetically Limited?		
319 lb/hour 139	7tons/year	□ Y	es X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):				
6. Emission Factor: 1.01 x %wt S lb/mmBTU			7. Emissions		
Reference: AP42 Table 3.1-2a (4/00)			Method Code: 3		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24	4-month	Period:		
tons/year	From: To:				
9.a. Projected Actual Emissions (if required):	9.b. Projected N	9.b. Projected Monitoring Period:			
tons/year	5 years 10 years				
10. Calculation of Emissions:  Fuel Sulfur Content = 0.5 wt% as per TV Permit 1030012-004-AV Condition B.6  Maximum Heat Input Rate = 631 mmBTU/hr per TV Permit 1030012-004-AV Condition B.1  Emission Factor = 1.01 x Fuel Sulfur Content [0.5 wt%] = 0.505 lb SO2/mmBTU  Potential Emissions: 631 mmBTU/hr x 0.505 lb/mmBTU = 319 lb/hr SO2 319 lb SO2/hr x 8760 hr/yr x 5 E-4 tons/lb = 1397TPY SO2			ndition B.1		
11. Potential, Fugitive, and Actual Emissions Co	omment:				

EMISSIONS UNIT INFORMATION Section [4] of [6] Higgins Power Plant POLLUTANT DETAIL INFORMATION
Page [1 ] of [1 ]
Combustion Turbine Peaking Unit CTP 4

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units: Fuel Oil Sulfur Content 0.5 wt%	4. Equivalent Allowable Emissions: 319 lb/hour 1397 tons/year			
5.	Method of Compliance: Fuel oil sulfur content analysis				
6.	6. Allowable Emissions Comment (Description of Operating Method): Existing requirement in TV Permit No. 1030012-004-AV Specific Condition B.9				
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.	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.	Allowable Emissions Comment (Description	of Operating Method):			

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 4

#### G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>2</u>

Visible Emissions Subtype:     VE20	2. Basis for Allowable Opacity:  X Rule  Other
3. Allowable Opacity:	
l * *	cceptional Conditions: %
Maximum Period of Excess Opacity Allow	•
	ed. Illiviloui
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Existing requir	rement in TV Permit No. 1030012-004-AV Specific
Condition B.11 and B.16. Note annual compliance	·
400 hours per year.	. —
Too hours por your.	
·	
	<u>-</u>
Visible Emissions Limitation: Visible Emissi	ions Limitation <u>2</u> of <u>2</u>
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE99	X Rule
3. Allowable Opacity:	
	sceptional Conditions: 100 %
Maximum Period of Excess Opacity Allowe	ed: 60 min/hour
4. Method of Compliance: Best Operational Pra	actices
in internet of complianton bott operational in	
5. Visible Emissions Comment: Existing requir	rement in TV Permit No. 1030012-004-AV Specific
1	•
Condition B.7 for startup, shutdown or malfunctions.	

## EMISSIONS UNIT INFORMATION Section [4] of [6]

Higgins Power Plant
Combustion Turbine Peaking Unit CTP 4

#### H. CONTINUOUS MONITOR INFORMATION

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

<u>Co</u>	Continuous Monitoring System: Continuous Monitor of				
1.	Parameter Code:	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:				
<u> </u>	ntinuous Monitoring System: Continuous	Mon			
1.	Parameter Code:		2. Pollutant(s):		
3.	CMS Requirement:		Rule Other		
4.	Monitor Information				
	Manufacturer: Model Number:		Serial Number:		
5.	Installation Date:	Γ	6. Performance Specification Test Date:		
3.	installation Date:		6. Performance Specification Test Date:		
7.	Continuous Monitor Comment:				
7.	Continuous Monitor Comment:				
7.	Continuous Monitor Comment:				
7.	Continuous Monitor Comment:				
7.	Continuous Monitor Comment:				

### EMISSIONS UNIT INFORMATION Section [4] of [6]

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 4

### H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

1	ontinuous Monitoring System: Continuo	74B 1710Intol 01
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:	
<u>C</u>	ontinuous Monitoring System: Continuo	ous Monitor of
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement:	Rule Other
3.	CMS Requirement:  Monitor Information  Manufacturer:	Rule  Other
4.	Monitor Information  Manufacturer:  Model Number:	Serial Number:
4.	Monitor Information Manufacturer:	

#### **EMISSIONS UNIT INFORMATION**

**Higgins Power Plant** Combustion Turbine Peaking Unit CTP 4

Section [4]

### 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)  X Attached, Document ID: CTP-1 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)  X Attached, Document ID: CTP-2 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)  X Attached, Document ID: CTP-3  Previously Submitted, Date  Not Applicable (construction application)
5.	Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records  Attached, Document ID:  Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date:
	Test Date(s)/Pollutant(s) Tested:
	X To be Submitted, Date (if known):
	Test Date(s)/Pollutant(s) Tested: VE (on oil) – See FAI-6
	□ 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

DEP Form No. 62-210.900(1) - Instructions 70

Effective: 2/2/06

# EMISSIONS UNIT INFORMATION Section [4] of [6]

# Higgins Power Plant Combustion Turbine Peaking Unit CTP 4

### 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 Analysis (Rule 62-212.400(4)(d), F.A.C., and
Rule 62-212.500(4)(f), F.A.C.)
Attached, Document ID: Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling
facilities only)
Attached, Document ID: Not Applicable
Additional Requirements for Title V Air Operation Permit Applications
1. Identification of Applicable Requirements
X Attached, Document ID: FAI-5
2. Compliance Assurance Monitoring
Attached, Document ID: Not Applicable
3. Alternative Methods of Operation
X Attached, Document ID: CTP-5 Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
Attached, Document ID: X Not Applicable
5. Acid Rain Part Application
Certificate of Representation (EPA Form No. 7610-1)
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Attached, Document ID: Previously Submitted, Date:
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID: Previously Submitted, Date:
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID: Previously Submitted, Date:
Not Applicable

EMISSIONS UNIT INFORMATION Section [4] of [6]	Higgins Power Plant Combustion Turbine Peaking Unit CTP 4
Additional Requirements Comment	

#### 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 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 for air permit. 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 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/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. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. 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 construction permitting and insignificant emissions units 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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Higgins Power Plant Fuel Storage Tanks

## A. GENERAL EMISSIONS UNIT INFORMATION

## Title V Air Operation Permit Emissions Unit Classification

	-	V air operation perr	•	eck one, if applying fo tem if applying for an	r an initial, revised or air construction			
	emissions ur  The emissions	<ul> <li>☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</li> <li>☐ The emissions unit addressed in this Emissions Unit Information Section is an</li> </ul>						
	<del></del>	emissions unit.  Description and Sta	ntus					
$\overline{}$	<ol> <li>Type of Emissions Unit Addressed in this Section: (Check one)</li> <li>This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</li> <li>This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</li> </ol>							
	This Emis	sions Unit Informat	ion Section add	dresses, as a single em les which produce fugi	· ·			
	<ol> <li>Description of Emissions Unit Addressed in this Section:</li> <li>Fuel Storage Tanks</li> </ol>							
[3	3. Emissions Uni	it Identification Nur	mber: -010					
4	4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit?  Yes  No			
Š	<ul><li>Package Unit: Manufacturer:</li></ul>			Model Number:				
1	0. Generator Nar	neplate Rating: 1	МW					
1	10. Generator Nameplate Rating: MW  11. Emissions Unit Comment:							

## **Emissions Unit Control Equipment**

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

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

<b>Segment Description and Rate:</b>	Segment 1 of	2
--------------------------------------	--------------	---

1. Segment Description (Pro	1. Segment Description (Process/Fuel Type):				
Petroleum and Solvent Evaporation – Petroleum Product Storage – Fugitive Emissions – Fuel Oil Storage					
2. Source Classification Cod 4-03-888-01	le (SCC):	3. SCC Units 1000 Gallo	:: ns Storage		
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor: 405		
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:		
10. Segment Comment:	1		-		
Segment Description and Rate: Segment 2 of 2					
1. Segment Description (Process/Fuel Type):					
Petroleum and Solvent Evaporation – Petroleum Product Storage – Fugitive Emissions – Fuel Oil					
Throughput					
2. Source Classification Cod 4-03-999-99	le (SCC):	3. SCC Units	s: ns Throughput		
4. Maximum Hourly Rate:	5. Maximum		6. Estimated Annual Activity		
<b>7</b> 26 10 04 0 10			Factor: 152,000		
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:		
10. Segment Comment: Assur	ned Max. Through	put = Sum of Max	. Annual Fuel Oil Burned in CTs:		

10. Segment Comment: Assumed Max. Throughput = Sum of Max. Annual Fuel Oil Burned in CTs: 35925 + 35925 + 40055 + 40055 = 152,000 Kgallons per year.

Max fuel oil burned per conversion of maximum heat input rate in Title V Permit No. 1030012-004-AV Specific Condition B.1 using 138 mmBTU/Kgallons. Note maximum rate can vary depending on heating value of fuel burned.

#### E. EMISSIONS UNIT POLLUTANTS

## List of Pollutants Emitted by Emissions Unit

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

## **EMISSIONS UNIT INFORMATION** [6]

Section [5] of **Higgins Power Plant** Fuel Storage Tanks

## 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
6.	Compliance Demonstration Reports/Records  Attached, Document ID:  Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date:  Test Date(s)/Pollutant(s) Tested:
	To be Submitted, Date (if known):  Test Date(s)/Pollutant(s) Tested:
	Not Applicable
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute  Attached, Document ID: \textbf{X} Not Applicable

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# EMISSIONS UNIT INFORMATION Section [5] of [6]

Higgins Power Plant Fuel Storage Tanks

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 Analysis (Rule 62-212.400(4)(d), F.A.C., and
Rule 62-212.500(4)(f), F.A.C.)
Attached, Document ID: Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling
facilities only)
Attached, Document ID: Not Applicable
Additional Requirements for Title V Air Operation Permit Applications
1. Identification of Applicable Requirements
Attached, Document ID: N/A (Unregulated EU)
2. Compliance Assurance Monitoring
Attached, Document ID: Not Applicable
3. Alternative Methods of Operation
Attached, Document ID: Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
Attached, Document ID: Not Applicable
5. Acid Rain Part Application
Certificate of Representation (EPA Form No. 7610-1)
Copy Attached, Document ID:
☐ Acid Rain Part (Form No. 62-210.900(1)(a))
Attached, Document ID: Previously Submitted, Date:
Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: Previously Submitted, Date:
☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: Previously Submitted, Date:
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: Previously Submitted, Date:
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID: Previously Submitted, Date:
☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID: Previously Submitted, Date:
X Not Applicable

	ONS UNI. [5]	of	[6]	Fuel Storage Tanks	
Addition	al Requir	<u>ements</u>	Comment		

#### 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 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 for air permit. 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 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/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. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. 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 construction permitting and insignificant emissions units 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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#### A. GENERAL EMISSIONS UNIT INFORMATION

## **Title V Air Operation Permit Emissions Unit Classification**

1.		Unregulated Emissic V air operation perm SOP only.)				
	emissions u					
	<del></del>	sions unit addressed demissions unit.	in this Emissic	ns Unit Informa	tion Sect	tion is an
En	nissions Unit	Description and Sta	<u>itus</u>			
1.	Type of Emis	ssions Unit Addresse	d in this Section	n: (Check one)		
		ssions Unit Informat				•
	-	r production unit, or	-	-		ir pollutants and
		s at least one definab	•	•	•	:
		ssions Unit Informat r production units an			•	
	_	vent) but may also pr				energ Commonweal Posses
	☐ This Emi	ssions Unit Informat	ion Section add	dresses, as a sing	le emiss	ions unit, one or
		cess or production ur		_		
2.	Description of	of Emissions Unit Ad	ldressed in this	Section:		
Ra	ocatable diesel	generator(s) with a ma	avimum (combin	ed) heat input of 2	5 74 mm	RTI I/hour while heing
		illons of no. 2 fuel oil/ho				
3.		nit Identification Nur				
4.	Emissions	5. Commence	6. Initial	7. Emissions		. Acid Rain Unit?
	Unit Status	Construction	Startup	Major Gro	up	Yes
	Code:	Date:	Date:	SIC Code:		X No
9.		-•		45		
9.	Manufacture			Model Number:		
10.			IW			
		nit Comment: The gene	•	ed to any of the following	g facilities:	
		owerline Road, Red Level, Citru Island, St. Petersburg, Pinella				•
		Prive, Oldsmar, Pinellas County				
		ve. & 2nd St. South, St. Peters				
		n Facility, State Road 462, 1 m x, County Road 555, 1 mi. sout				
		1729 Baileys Road, Holiday, Pa		on County.		

# EMISSIONS UNIT INFORMATION Section [6] of [6]

Higgins Power Plant Relocatable Diesel Generator(s)

## **Emissions Unit Control Equipment**

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

#### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

## **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughput Rate:	
2.	Maximum Production Rate:	
3.	Maximum Heat Input Rate: 25.74 million Btu/hr	
4.	Maximum Incineration Rate: pounds/hr	
	tons/day	
5.	Requested Maximum Operating Schedule:	
	24 hours/day 7 days/week	
	52 weeks/year 2970 hours/year	ar
6. be	Operating Capacity/Schedule Comment: Relocatable diesel generator(s) with a maximum (combined) heat input of 25.74 mmBTU/hour ing fueled by 186.3 gallons of no. 2 fuel oil/hour with a maximum combined rating of 2460 kW.	while

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

## **Emission Point Description and Type**

I. Identification of Point on Plot Plan or Flow Diagram: Reloc.Gen		2. Emission Point 7	Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Each generator exhaust through a single stack.				
4. ID Numbers or Descriptions	s of Emission Ur	nits with this Emission		
5. Discharge Type Code: V	<ol><li>Stack Height 15 feet</li></ol>	:	<ol> <li>Exit Diameter:</li> <li>1 feet</li> </ol>	
8. Exit Temperature: 1004 °F	9. Actual Volur 7,283 acfm	netric Flow Rate:	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates Zone: 17 East (km): 336.5 North (km): 3098.4		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
Zone: 17 East (km): 336.5 Latitude (DD/MM/SS)				

## D. SEGMENT (PROCESS/FUEL) INFORMATION

Internal Combustion Engines - Electric Generation - Distillate Oil (Diesel) - Reciprocating

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type):

2. Source Classification Code 2-01-001-02	e (SCC):	3. SCC Units: 1000 Gallons Burned			
4. Maximum Hourly Rate: 0.19	5. Maximum 5553	Annual Rate:	6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur: 0.5	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 138		
10. Segment Comment:  Maximum hourly rate per Title V Permit No. 1030012-004-AV. Maximum Annual Rate based on 25.74 mmBTU/hr/generator and 2970 engine-hours per year (TV Permit Specific Conditions C.2 and C.5., respectively). Note maximum rate can vary depending on heating value of fuel burned.					
Segment Description and Ra	ite: Segment _o	of _			
1. Segment Description (Process/Fuel Type):					
Source Classification Code (SCC):     3. SCC Units:					
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit:		
10. Segment Comment:					

## E. EMISSIONS UNIT POLLUTANTS

#### List of Pollutants Emitted by Emissions Unit

List of I onditales Emitted by Emissions Cite				
1. Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant	
	Device Code	Device Code	Regulatory Code	
PM			NS	
PM10			NS	
SO2			EL	
NOX			NS	
СО			NS	
VOC			NS	

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#### **EMISSIONS UNIT INFORMATION** Section [6] of [6] **Higgins Power Plant**

POLLUTANT DETAIL INFORMATION Page [1] of [1] Relocatable Diesel Generator(s)

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -

#### POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal

Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if anniving for an air anaration narmit

applying for an air operation permit.				
1. Pollutant Emitted:	2. Total Percent Efficiency of Control:			
SO2				
3. Potential Emissions:	4. Synthetically Limited?			
7.3 lb/hour 1°	tons/year Yes X No			
5. Range of Estimated Fugitive Emissions (as	applicable):			
to tons/year				
6. Emission Factor: 39.1 lb/Kgallons	7. Emissions			
	Method Code:			
Reference: EPA WebFIRE	3			
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:				
Maximum rate = 0.1863 kgallons/hr per TV Permit 10	)30012-004-AV			
Potential Emissions: 0.1863 kgallons/hr x 39.1 lbs SO2/Kgallons = 7.3 lbs SO2 per hour 553 kgallons/yr x 39.1 lbs SO2/kgallons x 5 E -04 tons/lb = 11 TPY SO2				
11. Potential, Fugitive, and Actual Emissions Comment:				

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#### **EMISSIONS UNIT INFORMATION**

Section [6] of [6] Higgins Power Plant

#### POLLUTANT DETAIL INFORMATION

Page [1 ] of [1 ] Relocatable Diesel Generator(s)

#### F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -

#### **ALLOWABLE EMISSIONS**

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

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: Fuel Oil Sulfur Content 0.5 wt%	4.	Equivalent Allowable Emissions: 7.3 hour 11 tons/year
5.	Method of Compliance: Fuel oil sulfur content analysis		
6.	Allowable Emissions Comment (Description Existing requirement in TV Permit No. 1030012-0		• •
<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 C	Operating Method):
<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 C	perating Method):

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### Higgins Power Plant Relocatable Diesel Generator(s)

#### G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

Visible Emissions Subtype:     VE20	2. Basis for Allowable Opacity:  ☐ Rule ☐ Other
3. Allowable Opacity:	
_ • •	aceptional Conditions:
Maximum Period of Excess Opacity Allowe	
4. Method of Compliance: EPA Method 9	
·	
5. Visible Emissions Comment: Existing require	ement in TV Permit No. 1030012-004-AV Specific
Conditions C.6. and C.12.	
Visible Emissions Limitation: Visible Emissi	ons Limitation 2 of 2
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE99	Rule
	7 Rule
3. Allowable Opacity:	
Normal Conditions: % Ex	ceptional Conditions: 100 %
Maximum Period of Excess Opacity Allowe	ed: 60 min/hour
4. Method of Compliance: Best Operational Pra	actices
5. Visible Emissions Comment: Existing require	ement in TV Permit No. 1030012-004-AV Specific
Condition C.8 for startup, shutdown or malfunctions.	

# Higgins Power Plant Relocatable Diesel Generator(s)

#### H. CONTINUOUS MONITOR INFORMATION

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

<u>C</u>	ontinuous 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:
<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor of
	Parameter Code:	Monitor of 2. Pollutant(s):
1.	Parameter Code:  CMS Requirement:  Monitor Information Manufacturer:	2. Pollutant(s):  □ Rule □ Other
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:	2. Pollutant(s):  Rule Other  Serial Number:
3.	Parameter Code:  CMS Requirement:  Monitor Information Manufacturer:	2. Pollutant(s):  □ Rule □ Other

# Higgins Power Plant Relocatable Diesel Generator(s)

## H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

<u>Co</u>	Continuous Monitoring System: Continuous Monitor of			
1.	Parameter Code:	2. Pollutant(s):		
	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	ntinuous Monitoring System: Continuous	Monitor of		
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor of  2. Pollutant(s):		
	· · · · · · · · · · · · · · · · · · ·			
3.	Parameter Code:	2. Pollutant(s):		
3.	Parameter Code:  CMS Requirement:  Monitor Information	2. Pollutant(s):		
3.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:	2. Pollutant(s):  Rule  Other		
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:	2. Pollutant(s):  Rule   Other  Serial Number:		
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	2. Pollutant(s):  Rule   Other  Serial Number:		
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	2. Pollutant(s):  Rule   Other  Serial Number:		
3. 4.	Parameter Code:  CMS Requirement:  Monitor Information  Manufacturer:  Model Number:  Installation Date:	2. Pollutant(s):  Rule   Other  Serial Number:		

## EMISSIONS UNIT INFORMATION

Section [6]

#### of [6]

# Higgins Power Plant Relocatable Diesel Generator(s)

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

# EMISSIONS UNIT INFORMATION Section [6] of [6]

## Higgins Power Plant Relocatable Diesel Generator(s)

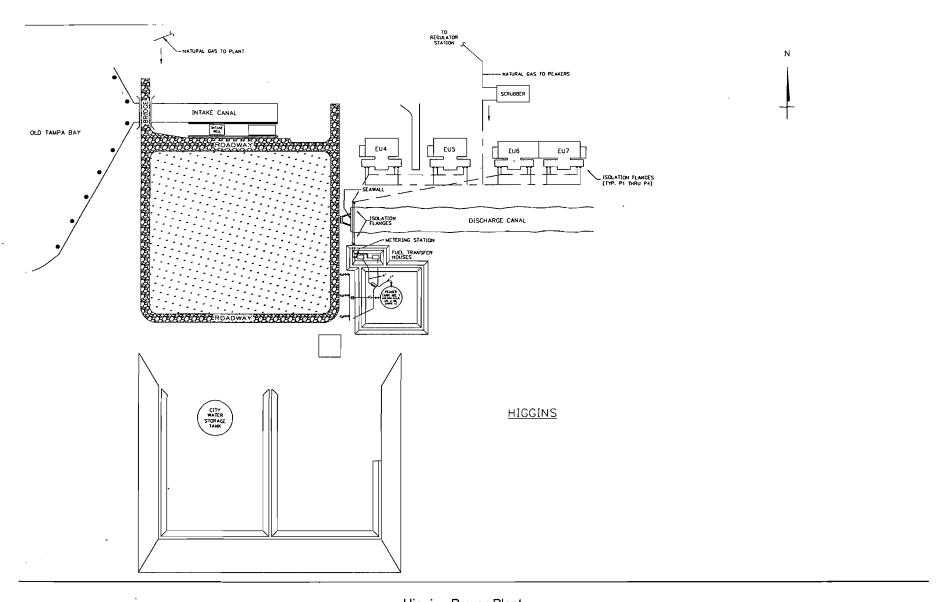
Additional Rec	quirements f	or Air	Construction	Permit A	pplications

EMISSIONS UNIT INFORMATION Section [6] of [6]	Higgins Power Plant Relocatable Diesel Generator(s)
Additional Requirements Comment	

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## Attachment FAI-1

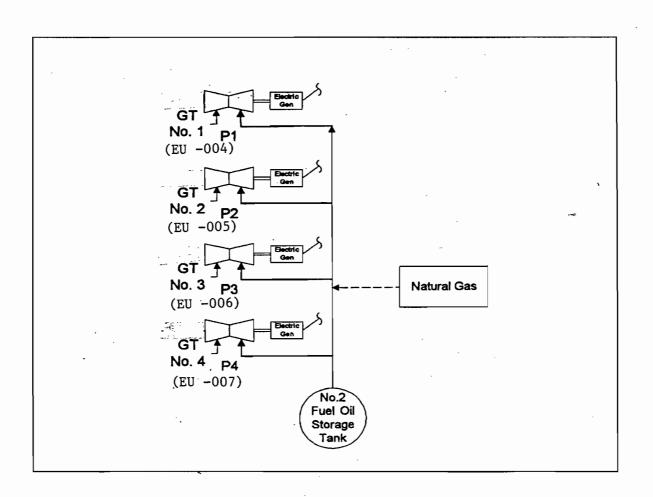
Facility Plot Plan



Higgins Power Plant **Attachment FAI-1**Facility Plot Plan

## **Attachment FAI-2**

Process Flow Diagram



Attachment FAI-2 Process Flow Diagram Higgins Power Plant

## **Attachment FAI-3**

Precautions to Prevent Unconfined Particulate Matter Emissions

#### **Attachment FAI-3**

## Precautions to prevent emissions of Unconfined Particulate Matter Higgins Power Plant

The Higgins Power Plant has negligible amounts of unconfined particulate matter emissions as a result of the facility operations. As in the Higgins Title V Permit No. 1030012-004-AV Facility-wide Condition 8. and Rule 62-296.320(4)(c)2., F.A.C., reasonable precautions to prevent emissions of unconfined particulate includes: maintenance of paved areas as needed, regular mowing of grass and care of vegetation, and limiting access to plant property by unnecessary vehicles.

## Attachment FAI-4

Insignificant Activities

#### Attachment FAI-4

Insignificant Activities Higgins Power Plant

The below is a list of emission units and/or activities at the Higgins Power Plant that are considered insignificant. This list takes the place of the one in the current Title V Permit 1030012-004-AV Appendix I-1.

- Lube Oil System Vents
- Lube Oil Reservoir Tank
- Parts Washers/Degreasers
- Waste Oil Storage Tanks
- Luke Oil Storage Shed
- Surface Coating and Solvent Cleaning
- No. 2 Diesel Truck Fueling Station

The reference to the on-site generated boiler non-hazardous cleaning chemicals for Steam Generating Units – SAG 2, SAG 3, & SAG 4 in Appendix I-1 of the current Title V permit should be removed. This activity is no longer performed as the Emissions Unit Nos. -001, -002, and -003 (Fossil Fuel Fired Steam Generators SG 1, SG 2, and SG 3, respectively) were torn down on October 20, 2006.

## **Attachment FAI-5**

Applicable Requirements

#### Title V Core List

Effective: 03/01/02

[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 06-01-01

62-4.030, F.A.C.: General Prohibition.

62-4.040, F.A.C.: Exemptions.

62-4.050, F.A.C.: Procedure to Obtain Permits; Application

62-4.060, F.A.C.: Consultation.

62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.

62-4.080, F.A.C.: Modification of Permit Conditions.

62-4.090, F.A.C.: Renewals.

62-4.100, F.A.C.: Suspension and Revocation.

62-4.110, F.A.C.: Financial Responsibility.

62-4.120, F.A.C.: Transfer of Permits.

62-4.130, F.A.C.: Plant Operation - Problems.

62-4.150, F.A.C.: Review.

62-4.160, F.A.C.: Permit Conditions.

62-4.210, F.A.C.: Construction Permits.

62-4.220, F.A.C.: Operation Permit for New Sources.

## CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

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

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

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

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

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

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

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

#### **Title V Core List**

- 62-210.350, F.A.C.: Public Notice and Comment.
- 62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
- 62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.

Effective: 03/01/02

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

## CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 08-17-00

## CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

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

#### **Title V Core List**

Effective: 03/01/02

## CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

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 03-02-99

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

62-297.330, F.A.C.: Applicable Test Procedures.

62-297.340, F.A.C.: Frequency of Compliance Tests.

62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.

62-297.350, F.A.C.: Determination of Process Variables.

62-297.570, F.A.C.: Test Report.

62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

#### Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests

CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99

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

#### NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Mr. Michael Lentz Plant Manager Higgins Power Plant 100 Central Avenue, MAC – IC44 St. Petersburg, Florida 33733-4042/

Pinellas County
FINAL Permit Project No.: 1030012-004-AV
Higgins Power Plant
Progress Energy Florida

Facility ID No. 1030012

Énclosed is FINAL Title V Permit Revision Number 1030012-004-AV for the Higgins Power Plant Station located at 998 East Shore Drive, Oldsmar, Pinellas County, Florida, issued pursuant to Chapter 403, Florida Statutes (F.S.).

An electronic version of this permit has been posted on the Division of Air Resource.

Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA)

Region 4 office's review. The web site address is:

"http://www.dep.state.fl.us/air/permitting/airpermits/AirSearch\_ltd.asp"

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation FINAL Permit Revision No. 1030012-004-AV Higgins Power Plant Page 2 of 3

#### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby	certi	fies that this NOTICE OF
FINAL PERMIT REVISION (including the FINAL permit revision) y copies were mailed by U.S. Mail before the close of business on	as s	ent by certified mail (*) and
copies were mailed by U.S. Mail before the close of business on X	18	105 to the person(s) listed
or as otherwise noted:	l	

Mr. Michael Lentz, Progress Energy Florida \*

E-mail Copy furnished to:

Mr. Dave Meyer, Progress Energy Florida

Mr. Scott Osbourn, P.E., Golder Associates

Mr. Joel Smolen, DEP Southwest District Office

Mr. Peter Hessling, PCDEM AQD

Ms. Barbara Friday, DEP Tallahassee [barbarafriday@dep.state.fl.us]( for posting with U.S. EPA, Region 4)

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

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt

of which is hereby acknowledged.

(Clerk)

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FINAL Permit Revision No. 1030012-004-AV Higgins Power Plant
Page 3 of 3

## **FINAL PERMIT DETERMINATION**

## I. Comment(s).

No comments were received from U.S. EPA, Region 4, concerning the PROPOSED Title V Permit Revision that was posted on the Department's web site on June 10, 2005.

## II. Conclusion.

The permitting authority hereby issues the FINAL Permit Revision No. 1030012-004-AV with no changes.

1.133

#### **STATEMENT OF BASIS**

Progress Energy Florida Higgins Power Plant Facility ID No.: 1030012 Pinellas County

Title V Air Operation Permit Revision FINAL Permit Project No.: 1030012-004-AV

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. This facility Title V air operation permit renewal, 1030012-002-AV, was issued on December 23, 2002. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The purpose of this permit revision is to incorporate the following language: "ASTM D1552-90 or later editions" to the list of acceptable fuel oil tests methods in Section III, Specific Conditions A.20, B.12 and C.13 of this Title V permit. A later edition of this method (ASTM D1552-95) is referenced in Rule 62-297.440(1)(m) F.A.C.

The following conditions established in the Title V Air Operation Permit No. 1030012-002-AV are changed as follows:

A.20. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-95, or the later editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

B.12. The fuel sulfur content, percent by weight, provided by the vendor or permittee for each delivery of liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the later editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable. [Rules 62-213.440 and 62-297.440, F.A.C.]

C.13. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88, and ASTM D129-95, or the later editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable.

[Rules 62-213.440 and 62-297.440, F.A.C.]

This facility consists of three fossil fuel fired steam generators (SG) and four simple cycle combustion turbine peaking units (CTP), all of which are pre-NSPS sources (CTP); ancillary equipment and relocatable diesel generators.

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Fossil Fuel Fired Steam Generators SG 1, SG 2, and SG 3 were all placed on "Long Term Reserve Shutdown" on January 24, 1994 (Rule 62-210.300(2)(a)3.d., F.A.C.). The maximum permitted heat input rates for SG 1, SG 2, and SG 3 are 548, 523, and 548 MMBtu/hour, respectively. The emissions units are fired on new No. 6 or lighter grades of fuel oil, as permitted herein. Natural gas and on-specification used oil, as permitted herein, may be fired in these emissions units as an alternate fuel. SG 1, SG 2, and SG 3 generate steam to power turbines that drive generators with name plate ratings of 43, 42, and 41 MW (megawatts of electricity), respectively. These units are regulated under the Acid Rain Program, Phase II. Each SG exhausts through a single stack. Emissions from these units are uncontrolled. These units started operation in 1951 (SG1), 1953 (SG2), and 1954 (SG3).

The combustion turbine peaking units (CTPs) may only fire new No. 2 fuel oil or natural gas having a maximum sulfur content of 0.5 percent, by weight, and I grain per 100 dry standard cubic feet (dscf), respectively. CTP 1 and CTP 2 have a maximum heat input of 566 MMBtu/hour at 59° F and each powers a generator rated at 37.0 MW (megawatts of electricity). CTP 3 and CTP 4 have a maximum heat input of 631 MMBtu/hour at 59° F and each powers a generator rated at 42.9 MW (megawatts of electricity). Emissions are not controlled and each turbine exhausts through a separate stack. These emissions units are not subject to the Acid Rain Program. CTP 1, CTP 2, CTP 3, and CTP 4 began commercial service on March 15, 1969, April 12, 1969, December 1, 1970, and January 9, 1971, respectively.

The relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. These relocatable units serve this and six other Florida Power facilities. Emissions from the generator(s) are uncontrolled. These conditions were requested in the Initial Title V Permit Application for the Anclote Power Plant received June 14, 1996. The generator(s) began commercial operation on August 10, 1994.

CAM does not apply.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received July 3, 2002, this facility is not a major source of hazardous air pollutants (HAPs).



# Department of **Environmental Protection**

Jeb Bush Governor

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

Colleen M. Castille Secretary

#### Permittee:

Progress Energy Florida, Inc. 100 Central Avenue, Mail Code BP44 St. Petersburg, Florida 33701

FINAL Permit No.: 1030012-004-AV

Facility ID No.: 1030012 Higgins Power Plant

SIC No(s).: 49

**Project:** Title V Air Operation Permit Revision

The purpose of this permit revision is to incorporate the following language: "ASTM D1552-90 or later edition" to the list of acceptable fuel oil tests methods in the current Title V Air Operation Permit, Section III, Specific Conditions A.20, B.12 and C.13. This facility is located at 998 East Shore Drive, Oldsmar, Pinellas County. UTM Coordinates: Zone 17, 336.5 km East and 3098.4 km North; Latitude: 28° 00' 02" North and Longitude: 82° 39' 46" West.

This Title V Air Operation Permit Revision 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 drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

#### Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix I-1, List of Insignificant Emissions Units and/or Activities APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02 APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96 Alternate Sampling Procedure: ASP Number 97-B-01 OGC File Nos. 86-1580, 86-1581, 86-1582 dated December 11, 1986.

> Effective Date: August 4, 2005 Application Due Date: July 5, 2007 Expiration Date: December 31, 2007

> > Mulit D. Costan

Michael G. Cooke, Director Division of Air Resource

Management

MGC/TLV/AL/th

Progress Energy Florida Higgins Power Plant Facility ID No.: 1030012 Pinellas County

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## Title V Air Operation Permit Revision

FINAL Permit Project No.: 1030012-004-AV Revision of Title V Air Operation Permit No.: 1030012-002-AV

## Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section
Telephone: 850/488-0114

Fax: 850/922-6979

**Compliance Authority:** 

Pinellas County Department of Environmental Management
Air Quality Division
300 South Garden Avenue
Clearwater, Florida 34616
Telephone: 813/464-4422

Fax: 813/464-4420

## Title V Air Operation Permit Revision

FINAL Permit Project No.: 1030012-004-AV Revision of Title V Air Operation Permit No.: 1030012-002-AV

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#### Permittee:

Progress Energy Florida, Inc. 100 Central Avenue, Mail Code BP44 St. Petersburg, Florida 33701 FINAL Permit No.: 1030012-004-AV

Facility ID No.: 1030012 Higgins Power Plant

**SIC No(s).:** 49

**Project:** Title V Air Operation Permit Revision

The purpose of this permit revision is to incorporate the following language: "ASTM D1552-90 or later edition" to the list of acceptable fuel oil tests methods in the current Title V Air Operation Permit, Section III, Specific Conditions A.20, B.12 and C.13. This facility is located at 998 East Shore Drive, Oldsmar, Pinellas County. UTM Coordinates: Zone 17, 336.5 km East and 3098.4 km North; Latitude: 28° 00' 02" North and Longitude: 82° 39' 46" West.

This Title V Air Operation Permit Revision 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 drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

## Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix 1-1, List of Insignificant Emissions Units and/or Activities APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02 APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96 Alternate Sampling Procedure: ASP Number 97-B-01 OGC File Nos. 86-1580, 86-1581, 86-1582 dated December 11, 1986.

Effective Date: August 4, 2005 Application Due Date: July 5, 2007 Expiration Date: December 31, 2007

Michael G. Cooke, Director Division of Air Resource Management

MGC/TLV/AL/th

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

## Section I. Facility Information.

## Subsection A. Facility Description.

This facility consists of three fossil fuel fired steam generators (SG) and four simple cycle combustion turbine peaking units (CTP), all of which are pre-NSPS sources. The SGs are on long-term reserve shutdown. Each CT and SG exhausts through a separate stack. Relocatable diesel fired generator(s) with a maximum heat input of 25.74 MMBtu/hour and a maximum rating of 2460 Kilowatts may be relocated to this and six other Florida Power facilities.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received July 3, 2002, this facility is not a major source of hazardous air pollutants (HAPs).

## Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
-001 - 003	3 - Fossil Fuel Fired Steam Generators (Pre-NSPS) - SG 1, SG 2, & SG 3
-004 - 007	4 - Combustion Turbine Peaking Units (Pre-NSPS) - CTP 1, CTP 2, CTP 3, & CTP 4
7775047 -001	Relocatable Diesel Generator(s)

#### Unregulated Emissions Units and/or Activities

-009	General Purpose Engine
-010	Fuel Storage Tanks
-011	<b>Emergency Generator</b>

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

#### Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

## These documents are provided to the permittee for information purposes only:

Table 1-1: Summary of Air Pollutant Standards and Terms
Table 2-1: Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History

Statement of Basis

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

These documents and related correspondence are on file with the permitting authority: Initial Title V Air Operation Permit, 1030012-001-AV, effective January 1, 1998

Title V Air Operation Permit Renewal, 1030012-002-AV, effective January 1, 2003

Title V Air Operation Permit Application, 1030012-004-AV, request received on January 20, 2005 (complete April 11, 2005)

Documents listed in Appendix H-1 History

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

## Section II. Facility-wide Conditions.

## The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]
- 4. 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, Maryland 20703-1515 Telephone: 301/429-5018

and,

- **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]
- 5. <u>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

  [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

- 7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents 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 was deemed necessary and ordered at this time. [Rule 62-296.320(1)(a), F.A.C.]
- 8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: Maintenance of paved areas as needed, Regular mowing of grass and care of vegetation, and limiting access to plant property by unnecessary vehicles. [Rule 62-296.320(4)(c)2., F.A.C. and proposed by applicant in the Title V permit renewal application received July 3, 2002.]
- 9. Timely Recording, Monitoring and Reporting: When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.] {Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS.)
- 11. County Compliance Authority: The permittee shall submit all compliance related notifications and reports required of this permit to the Air Quality Division of the Pinellas County Department of Environmental Management:

Pinellas County Department of Environmental Management Air Quality Division 300 South Garden Avenue Clearwater, Florida 33756 Telephone: 813/464-4422 Fax: 813/464-4420

12. EPA Compliance Authority: Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

> United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Air and EPCRA Enforcement Branch Air Enforcement Section 61 Forsyth Street Atlanta, Georgia 30303-8960

> Telephone: 404/562-9155; Fax: 404/562-9163

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

14. Subsection C of Section III addresses specific conditions for a Relocatable Diesel Fired Generator(s) that may be relocated to this and six other FPC facilities. These specific conditions, requested in the Initial Title V Permit Application for the Anclote Power Plant received June 14, 1996, will become active and enforceable when FPC has notified the Department (as per specific condition III.C.24) that the relocatable generator(s) will be relocated to the Higgins Power Plant.

[AO 09-205952; and, Initial Title V Permit Application for the Anclote Power Plant received June 14, 1996.]

## Section III. Emissions Unit(s) and Conditions.

#### Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description (4.8.3%)
-001	Fossil Fuel Fired Steam Generator - SG 1
-002	Fossil Fuel Fired Steam Generator - SG 2
-003	Fossil Fuel Fired Steam Generator - SG 3

SG 1, SG 2, and SG 3 were all placed on "Long Term Reserve Shutdown" on January 24, 1994 (Rule 62-210.300(2)(a)3.d., F.A.C.). The maximum permitted heat input rates for SG 1, SG 2, and SG 3 are 548, 523, and 548 MMBtu/hour, respectively. The emissions units are fired on new No. 6 or lighter grades of fuel oil, as permitted herein. Natural gas and on-specification used oil, as permitted herein, may be fired in these emissions units as an alternate fuel. SG 1, SG 2, and SG 3 generate steam to power turbines that drive generators with name plate ratings of 43, 42, and 41 megawatts, respectively. These units are regulated under the Acid Rain Program, Phase II.

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Each SG exhausts through a single stack. Emissions from these units are uncontrolled.

{Permitting note(s): These emissions units are Pre-NSPS, regulated under Rules 62-296.405, F.A.C. (Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input), and regulated under Rule 62-296.700, F.A.C. (Reasonably Available Control Technology, RACT, Particulate Matter). SG 1 began commercial operation on June 6, 1951; SG 2 began commercial operation on June 30, 1953; and, SG 3 began commercial operation on January 30, 1954.}

## The following specific conditions apply to the emissions units listed above:

## Essential Potential to Emit (PTE) Parameters

#### A.1. Methods of Operation. Fuel(s).

- a. Startup & Shutdown: The only fuels allowed to be burned are new #6 or lighter grades of fuel oils. On-specification used oil shall only be burned if the PCB's are less than 2 ppm and may be blended with new #2 fuel oil. The maximum sulfur content is 2.5 percent, by weight.
- b. Normal: The only fuels allowed to be burned are new #6 or lighter grades of fuel oils and on-specification used oil. The maximum sulfur content is 2.5 percent, by weight.
- c. The maximum annual cumulative amount of on-specification used oil, whether generated on or offsite, that can be burned in these emissions units shall not exceed 5 percent of the total permitted heat input for emissions units SG 1, SG 2, and SG 3.

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d. The heat inputs in Specific Condition A.2. are based on the following fuel consumption rates while firing No. 6 fuel oil and natural gas. These rates may vary depending on the heating values of the fuels:

Emissions Unit	Hours/year	Fuel Oil(s)	Natural Gas
SG 1	8760	3,654 gallons/hour	0.50 MMSCF/hour
SG 2	8760	3,486 gallons/hour	0.49 MMSCF/hour
SG 3	8760	3,654 gallons/hour	0.50 MMSCF/hour

[Rule 62-213.410, F.A.C.; and AO's 52-216382, 52-216383, & 52-216384; and Title V application received on June 14, 1996.]

## A.2. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
SG 1	548	New No. 1, 2, 3, 4, 5 or 6 Fuel Oil & On-Specification Used Oil.*
	525	Natural Gas as an alternate fuel when available.
SG 2	523	New No. 1, 2, 3, 4, 5 or 6 Fuel Oil & On-Specification Used Oil.*
	515	Natural Gas as an alternate fuel when available.
SG 3	548	New No. 1, 2, 3, 4, 5 or 6 Fuel Oil & On-Specification Used Oil.*
	525	Natural Gas as an alternate fuel when available.

<sup>\*</sup> The on-specification used oil burned at this facility may be generated on or off-site. [Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine 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 the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

- **A.3.** Emissions Unit Operating Rate Limitation After Testing. See Specific Condition A.22. [Rule 62-297.310(2), F.A.C.]
- **A.4.** Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year/unit. [Rule 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging time for conditions A.5. - A.9. are based on the specified averaging time of the applicable test method.}

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A.5. <u>Visible Emissions</u>. Visible emissions from SG 1, SG 2, and SG 3 shall not exceed 40 percent opacity. The emissions units subject to the opacity standards of this condition shall conduct a compliance test for particulate matter emissions annually. The Department reserves the right to require the permittee to return to the more frequent testing schedule in Rule 62-296.405(1)(a), F.A.C., if the emission limiting standard for particulate matter is not regularly complied with.

[Rule 62-296.405(1)(a), F.A.C.; and, OGC Order File Nos. 86-1580, 86-1581, and 86-1582 dated December 11, 1986.]

**A.6.** <u>Visible Emissions - Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.]

- A.7. Particulate Matter. Particulate matter emissions during normal operations shall not exceed 0.1 pound per million Btu heat input [(54.8 lbs/hr & 240 TPY for SG 1 & SG 3, based on 548 MMBtu/hr.) and (52.3 lbs/hr & 229 TPY for SG 2, based on 523 MMBtu/hr.)] as measured by the applicable compliance methods specified in Specific Condition A.18. [Rule 62-296.405(1)(b), F.A.C.]
- A.8. Particulate Matter Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input [164.4 lbs/hr for SG 1 & SG 3 (based on 548 MMBtu/hr) and 156.9 lbs/hr for SG 2 (based on 523 MMBtu/hr)] during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- A.9. Sulfur Dioxide. When burning liquid fuel (fuel oil), sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by test methods in Specific Condition A.19. [Rule 62-296.405(1)(c)1.j., F.A.C.]
- **A.10.** Sulfur Dioxide Sulfur Content. The sulfur content of fuel oils, on-specification used oil, or any combination of the two burned in these units, shall not exceed 2.5 percent, by weight. See Specific Condition A.20.

[Rule 62-296.405(1)(e)3., F.A.C.]

#### **Excess Emissions**

**A.11.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

**A.12.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

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[Rule 62-210.700(2), F.A.C.]

**A.13.** 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.]

## **Monitoring of Operations**

A.14. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or permittee upon each fuel delivery. This protocol is allowed because the emissions units do not have an operating flue gas desulfurization device. See Specific Conditions A.9., A.10., A.19. and A.20. [Rule 62-296.405(1)(f)1.b., F.A.C.]

#### A.15. <u>Determination of Process Variables</u>.

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

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.16. <u>Visible emissions</u>. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See Specific Condition A.17. [Rule 62-296.405(1)(e)1., F.A.C.]

- **A.17.** DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
  - 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
  - 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity

standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:

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- a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
- b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]

A.18. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]

A.19. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or permittee upon each fuel delivery. See Specific Conditions A.9., A.10. and A.20.

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, Permits AO 64-185095.]

A.20. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-95, or the later editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable. [Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.21. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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[Rule 62-297.310(1), F.A.C.]

- A.22. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- A.23. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

## A.24. Applicable Test Procedures.

- (a) Required Sampling Time.
  - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
  - 2. Opacity Compliance Tests. The required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
    - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

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

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

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

**A.27.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

**A.28.** Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

## Record keeping and Reporting Requirements

**A.29.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Air Quality Division of the Pinellas County Department of Environmental Management.

[Rule 62-210.700(6), F.A.C.]

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**A.30.** Submit to the Air Quality Division of the Pinellas County Department of Environmental Management a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

#### A.31. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Air Quality Division of the Pinellas County Department of Environmental Management on the results of each such test.
- (b) The required test report shall be filed with the Air Quality Division of the Pinellas County Department of Environmental Management as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Air Quality Division of the Pinellas County Department of Environmental Management to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - 1. The type, location, and designation of the emissions unit tested.
  - 2. The facility at which the emissions unit is located.
  - 3. The owner or operator of the emissions unit.
  - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - 8. The date, starting time and duration of each sampling run.
  - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - 10. The number of points sampled and configuration and location of the sampling plane.
  - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  - 12. The type, manufacturer and configuration of the sampling equipment used.
  - 13. Data related to the required calibration of the test equipment.
  - 14. Data on the identification, processing and weights of all filters used.
  - 15. Data on the types and amounts of any chemical solutions used.
  - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  - 18. All measured and calculated data required to be determined by each applicable test procedure for each run.

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- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- A.25. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

- A.26. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
  - 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.
  - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    - a. Did not operate; or
    - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

## TABLE 297.310-1 CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F

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Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
  - a. Visible emissions, if there is an applicable standard;
  - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
  - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
- 9. The owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

A.32. Not federally enforceable. Compliance with the fuel oil sulfur content (% by wt) and sulfur dioxide emissions rate (lbs/MMBtu) of this permit shall be documented by the permittee through the submittal of quarterly reports for this facility. These quarterly reports shall be submitted within 30 days of the end of each calendar quarter to the Air Quality Division of the Pinellas County Department of Environmental Management.

[Rule 62-213.440, F.A.C.; and, AO 52-216382, AO 52-216383, and AO 52-216384.]

#### Addition limitations for On-Specification Used Oil

- **A.33.** On-Specification Used Oil. On-specification used oil generated at this facility or off-site may only be burned in these emissions units if compliance with all the conditions of this permit and the following additional conditions are demonstrated:
- a. On-specification Used Oil Allowed as Fuel: This permit allows the burning of used fuel oil meeting EPA "on-specification" used oil specifications, with a maximum sulfur content of 2.5 percent, by weight, and a PCB concentration of no greater than 49 ppm.

On-specification used oil shall meet the following specifications: [40 CFR 279, Subpart B.]

- 1. Arsenic shall not exceed 5.0 ppm;
- 2. Cadmium shall not exceed 2.0 ppm;
- 3. Chromium shall not exceed 10.0 ppm;
- 4. Lead shall not exceed 100.0 ppm;
- 5. Total halogens shall not exceed 1000 ppm;
- 6. Flash point shall not be less than 100 degrees F.

Used oil that does not meet the specifications for on-specification used oil shall not be burned at this facility.

- b. Quantity Limited: The maximum cumulative annual amount of on-specification used oil that can be burned at this facility shall not exceed 5 % of the total allowable heat input for SG 1, SG 2, and SG 3.
- c. <u>Used Oil Containing PCBs Not Allowed:</u> Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement or any part of this condition.
- d. <u>PCB Concentration of 2 to 49 ppm</u>: On-specification used oil with a PCB concentration of 2 to 49 ppm shall be burned only at normal source operating temperatures. On specification used oil with a PCB concentration of 2 to 49 ppm shall not be burned during periods of startup or shutdown. Before accepting from each marketer the first shipment of on-specification used oil with a PCB concentration of 2 to 49 ppm, the owner or operator shall provide each marketer with a one-time written and signed notice certifying that the owner or operator will burn the used oil in a qualified combustion device. The notice must state that EPA or a RCRA-delegated state agency has been given a description of the used oil

management activities at the facility and that an industrial boiler or furnace will be used to burn the used oil with a PCB concentration of 2 to 49 ppm. The description of the used oil management activities shall be submitted to the Administrator of EPA or Administrator, Hazardous Waste Regulation Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400.

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e. <u>Certification Required</u>: The owner or operator shall receive from the marketer, for each load of used oil received, a certification that the used oil meets the specifications for on-specification used oil and contains a PCB concentration of no greater than 49 ppm. This certification shall also describe the basis for the certification, such as analytical results.

{Note that a claim that used oil does not contain quantifiable levels of PCBs (that is, that the used oil contains less than 2 ppm of PCBs) must be documented by testing or other information. The first person making the claim that the used oil does not contain PCBs is responsible for furnishing the documentation. The documentation can be tests, personal or special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the used oil contains no detectable PCBs.}

f. <u>Testing Required</u>: If the owner or operator does not receive certification from the marketer as described above, the owner or operator shall properly sample and test each load of used oil received for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs\*, and percent sulfur content by weight, ash, and BTU value (BTU per gallon). Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

- \* Testing for PCB's is not necessary if quantifiable levels are less than 2 ppm (ref. to Specific Condition A.33.e.) If the owner or operator relies on certification from the marketer as described above, the owner or operator shall, at a minimum, each calendar quarter, sample one load of used oil received, selected at random by the owner or operator, and analyze the sample for the above parameters. If the analytical results show that the used oil does not meet the specification for onspecification used oil, or that it contains a PCB concentration of 50 ppm or greater, the owner or operator shall immediately notify the Air Quality Division of the Pinellas County Department of Environmental Management and provide the analytical results to the Department. The owner or operator shall immediately cease burning of the used oil.
- g. <u>Special Record Keeping Requirements</u>: The owner or operator shall obtain, make, and keep the following records related to the use of used oil:
  - (1) The gallons of on-specification used oil received and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
  - (2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)
  - (3) The name and address of all marketers delivering used oil to the facility.
  - (4) Copies of the marketer certifications, if obtained, and any supporting information.
  - (5) Documentation that the used oil contains less than 2 ppm PCBs, if claimed, including the name and address of the person making the claim.
  - (6) Results of the analyses required above.
  - (7) A copy of the notice to EPA and a copy of the one-time written notice provided to each marketer.
  - (8) The hourly usage if the on-specification used oil is burned exclusively (not blended).

The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained for 5 years.

h. <u>Quarterly Reporting Required</u>: The owner or operator shall submit to the Air Quality Division of the Pinellas County Department of Environmental Management, within thirty days of the end of each calendar quarter, a summary of the quarterly analyses and the total amount of on-specification used oil received and burned during the quarter.

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The owner or operator shall submit, with the Annual Operation Report form, the analytical results and the amount of on-specification used oil burned during the previous calendar year. [40 CFR 279.61 and 761.20(e); Rules 62-4.070(3), 62-212.400(2)(f)1. and 62-213.440, F.A.C.; and, initial Title V Application received June 14, 1996.]

#### **Operation and Maintenance Plan**

**A.34.** The following is the specified Operation and Maintenance Plan for Particulate Control as required by Rule.

#### A. Process Parameters

- 1. Heat Input Rate: SG 1 & SG 3 548 MMBtu/hr (Maximum), SG 2 523 MMBtu/hr (Maximum)
- 2. Fuel: No. 6 or lighter grades of fuel oil, on-specification used fuel oil, and natural gas with a maximum sulfur content, by weight, of 2.5%, 2.5%, and 1 grain per 100 dry standard cubic feet, respectively.
- 3. Fuel Firing Rate: SG 1 & SG 3 3654 gals/hr for fuel oils. SG 2 3486 gals/hr for fuel oil. SG 1 and SG 3 natural gas at 0.5 MMCF/hour and SG 2 natural gas at 0.49 MMCF/hr.
- 4. Ash Content: as sampled.
- 5. Steam Temperature: 950 °F
- 6. Steam Pressure: 1315 psig
- 7. Steam Flow Rate: 450,000 lb/hr
- 8. Stack Height: 174 ft
- 9. Boiler Manufacture: Babcock and Wilcox
- 10. Burner Arrangement: Front Fired

#### B. Inspection and Maintenance Program

- 1. Scheduled during major outages: Boilers, controls, auxiliaries, burners and duct work are to be inspected and repaired as necessary. All parts are to be inspected, cleaned and replaced as necessary.
- 2. Scheduled during non-peak load periods in spring and fall: This schedule is affected by forced outage requirements.
- 3. The following operating parameters are to be continuously monitored and maintained at appropriate levels to produce efficient fuel combustion:
  - a. fuel flow rate
  - b. fuel temperature
  - c. fuel pressure
  - d. air flow rate
  - e. steam flow rate
  - f. steam temperature
  - g. steam pressure
- 4. Plant operators are to monitor, adjust and record the following operating parameters at least once per day to assure efficient plant operations:
  - a. temperatures (superheat, fuel)
  - b. flows (steam, feedwater, fuel)
  - c. unit load

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- 5. Fuel oil quality is to be checked prior to delivery and/or burning. Fuel oil shall be analyzed, by the most recent ASTM method, for the determination of the following:
  - a. heat content (Btu/gal)
  - b. sulfur content (% by wt)
  - c. API gravity and density (lbs/gal)

## C. Recordkeeping

Records of inspections, maintenance, and performance parameters shall be retained for a minimum of five years and shall be made available to the Department or Air Quality Division of the Pinellas County Department of Environmental Management upon request.

[Rule 62-296.700(6), F.A.C.; and, AO 52-216382, AO 52-216383, and AO 52-216384.]

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## Section III. Emissions Unit(s) and Conditions.

#### Subsection B. This section addresses the following emissions unit(s).

E. U. ID No.	Brief Description
-004 - 007	Combustion Turbine Peaking Units, CTP 1, CTP 2, CTP 3, and CTP 4

The above referenced combustion turbine peaking units (CTPs) may only fire new No. 2 fuel oil or natural gas having a maximum sulfur content of 0.5 percent, by weight, and 1 grain per 100 dry standard cubic feet (dscf), respectively. CTP 1 and CTP 2 have a maximum heat input of 566 MMBtu/hour at 59° F and each powers a generator rated at 37.0 MW (megawatts of electricity). CTP 3 and CTP 4 have a maximum heat input of 631 MMBtu/hour at 59° F and each powers a generator rated at 42.9 MW (megawatts of electricity). Emissions are not controlled and each turbine exhausts through a separate stack. These emissions units are pre-NSPS and not subject to the Acid Rain Program. CTP 1, CTP 2, CTP 3, and CTP 4 began commercial service on March 15, 1969, April 12, 1969, December 1, 1970, and January 9, 1971, respectively.

{Permitting Note: The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required.}

#### The following specific conditions apply to the above referenced emissions units:

## Essential Potential to Emit (PTE) Parameters

**B.1.** Permitted Capacity. CTP 1 and CTP 2 each have a maximum heat input of 566 MMBtu/hour at 59° F and each powers a generator rated at 37.0 MW (megawatts of electricity). CTP 3 and CTP 4 each have a maximum heat input of 631 MMBtu/hour at 59° F and each powers a generator rated at 42.9 MW. At other ambient temperatures, the units shall be operated in accordance with established performance curves, which will be made available at the site during compliance testing. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 52-216420, AO 52-216421, AO 52-216422, and AO 52-216423.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine 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 the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

- B.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition B.13.
- **B.3.** Hours of Operation. Each emissions unit may operate continuously, i.e., 8,760 hours/year/CT. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

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## **B.4.** Methods of Operation - Fuels.

- (a). Only new No. 2 fuel oil having a maximum sulfur content of 0.5 percent, by weight, or natural gas having a maximum sulfur content of 1 grain per 100 dscf shall be fired in these turbines.
- (b). The heat inputs in Specific Condition B.1 are based on the following fuel consumption rates while firing new No. 2 fuel oil and natural gas. These rates may vary depending on the heating values of the fuels:

Emissions Unit(s)	New No. 2 Fuel Oil	Natural Gas
CTP 1 & CTP 2	4,032 gals/hr (96 bbl/hr)	0.57 MMCF/hr
CTP 3 & CTP 4	4,494 gals/hr (107 bbl/hr)	0.63 MMCF/hr

[Rules 62-4.160(2) and 62-213.440(1), F.A.C.; and, AO 64-216420, AO-216421, AO 64-216422, and AO 64-216423.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging time for condition B.5. is based on the specified averaging time of the applicable test method.}

**B.5.** <u>Visible Emissions</u>. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO 64-216420, AO-216421, AO 64-216422, and AO 64-216423.]

**B.6.** Sulfur Content. The sulfur content of the new No. 2 fuel oil shall not exceed 0.5 percent, by weight, and the sulfur content of the natural gas shall not exceed 1 gr/100 dscf. [Rule 62-213.440, F.A.C.; and, AO 64-216420, AO-216421, AO 64-216422, and AO 64-216423.]

#### **Excess Emissions**

- **B.7.** Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **B.8.** 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.]

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#### **Monitoring of Operations**

**B.9.** The permittee shall demonstrate compliance with the sulfur content limit with a fuel analysis provided by the vendor or permittee upon each fuel delivery. See Specific Condition **B.12**. [Rule 62-213.440, F.A.C.; and, AO 52-216420, AO 52-216421, AO 52-216422, and AO 52-216423.]

#### **B.10.** Determination of Process Variables.

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

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **B.11.** The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]
- **B.12.** The fuel sulfur content, percent by weight, provided by the vendor or permittee for each delivery of liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable.

[Rules 62-213.440 and 62-297.440, F.A.C.]

#### **B.13.** Operating Rate During Testing.

Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defines as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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 purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

#### **B.14.** Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate

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matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

- **B.15.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

  (a) General Compliance Testing.
  - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    - a. Did not operate; or
    - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
  - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
    - a. Visible emissions, if there is an applicable standard;
  - 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
  - 9. The owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management, at least 15 days prior to the date on which each formal compliance testis to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Air Quality Division of the Pinellas County Department of Environmental Management, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Air Quality Division of the Pinellas County Department of Environmental Management.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources

equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means

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of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

- **B.16.** <u>Visible Emissions Testing Annual</u>. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
  - a. only gaseous fuels; or
  - b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
  - c. only liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. and 8., F.A.C.]

## Record keeping and Reporting Requirements

**B.17.** Malfunction Reporting. In the case of excess emissions resulting from malfunctions as defined in Specific Conditions B.7 and B.8, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Air Quality Division of the Pinellas County Department of Environmental Management.

[Rule 62-210.700(6), F.A.C.]

## B.18. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Air Quality Division of the Pinellas County Department of Environmental Management on the results of each such test.
- (b) The required test report shall be filed with the Air Quality Division of the Pinellas County Department of Environmental Management as soon as practical but no later than 45 days after the last sampling run of each test is completed.

[Rule 62-297.310(8), F.A.C.]

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## Section III. Emissions Unit(s) and Conditions.

#### Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-7775047 -001	Relocatable Diesel Fired Generator(s)

The relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled. These conditions were requested in the Initial Title V Permit Application for the Anclote Power Plant received June 14, 1996. The generator(s) may be relocated at this facility and any of the following facilities:

- 1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
- 2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
- 3. Anclote Power Plant, 1729 Baileys Bluff Road, Holliday, Pasco County.
- 4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
- 5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
- 6. The future FPC Polk County Site, County Road 555, 1 mi. southwest of Homeland, Polk County.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack.}

The following specific conditions apply to the emissions units listed above regardless of location:

#### Essential Potential to Emit (PTE) Parameters

- C.1. These conditions become active and enforceable once FPC has given notification to the Air Quality Division of the Pinellas County Department of Environmental Management, if appropriate, that these units will be relocated to this facility. Notification shall be given as per Specific Condition C.24. [Rule 62-4.070(3), F.A.C.; Anclote Power Plant Permit AC 09-202080; and, Initial Title V Permit Application for the Anclote Power Plant received June 14,1996.]
- C.2. <u>Permitted Capacity</u>. The maximum operation heat input rates are as follows: [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Unit No.	MMBtu/hr/generator(s) Heat Input	Fuel Type
-7775047 -001	25.74	New Low Sulfur No. 2 Fuel Oil

- C.3. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition C.14. [Rule 62-297.310(2), F.A.C.]
- C.4. Methods of Operation Fuels. Only new low sulfur No. 2 fuel oil shall be fired in the combustion turbine(s).

[Rule 62-213.410, F.A.C.]

C.5. <u>Hours of Operation</u>. The hours of operation expressed as "engine-hours" shall not exceed 2970 hours in any consecutive 12 month period. The total hours of operation, expressed as "engine-hours", shall be the summation of the individual hours of operation of each generator.

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[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: The averaging time for condition C.6. is based on the run time of the specified test method, unless otherwise specified in this permit.}

**C.6.** <u>Visible Emissions</u>. Visible emissions from each generator shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

C.7. <u>Sulfur Dioxide - Sulfur Content</u>. The sulfur content of the new No. 2 fuel oil shall not exceed 0.50 percent, by weight.

[Requested in initial Title V Permit application dated June 14, 1996; and, Anclote Power Plant Permit AC 09-202080.]

#### **Excess Emissions**

- C.8. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- C.9. 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.]

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#### **Monitoring of Operations**

**C.10.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. See Specific Condition C.13. [Rule 62-213.440, F.A.C.]

#### C.11. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

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## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.12. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

- C.13. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88, and ASTM D129-95, or later editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable. [Rules 62-213.440 and 62-297.440, F.A.C.]
- C.14. Operating Rate During Testing. Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate of 186.3 gallons per hour. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operations may be limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Failure to submit the actual operating rate may invalidate the test. [Rules 62-297.310(2), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

## C.15. Applicable Test Procedures.

- (a) Required Sampling Time.
  - 2. Opacity Compliance Tests. The required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
    - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

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C.16. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

- (a) General Compliance Testing.
  - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    - a. Did not operate; or
    - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
  - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
    - a. Visible emissions, if there is an applicable standard;
  - 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
  - 9. The owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) Special Compliance Tests. When the Air Quality Division of the Pinellas County Department of Environmental Management, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Air Quality Division of the Pinellas County Department of Environmental Management.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; and, Anclote Power Plant Permit AO 09-205952.]

C.17. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

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C.18. After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content. See Specific Conditions C.6, C.7, C.10, C.13, and C.14. [Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

#### Recordkeeping and Reporting Requirements

C.19. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Air Quality Division of the Pinellas County Department of Environmental Management.

[Rule 62-210.700(6), F.A.C.]

#### C.20. Test Reports.

- (a) Each generator shall be tested on an annual basis within 30 days of the date October 25.
- (b) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Air Quality Division of the Pinellas County Department of Environmental Management on the results of each such test.
- (c) The required test report shall be filed with the Air Quality Division of the Pinellas County Department of Environmental Management as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (d) The test reports for a unit that has been relocated shall be submitted to the Department office that will handle compliance issues for the new location within 45 days of testing.

  [Rule 62-297.310(8), F.A.C.; and, Anclote Power Plant Permit AO 09-25952.]
- C.21. To demonstrate compliance with Specific Condition C.5, records shall indicate the daily hours of operation for each diesel generator, the daily hours of operation expressed as "engine-hours", and cumulative total hours of operation expressed as "engine hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Air Quality Division of the Pinellas County Department of Environmental Management upon request.

  [Rules 62-213.440 and 62-297.310(8), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]
- C.22. To demonstrate compliance with Specific Condition C.7, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Air Quality Division of the Pinellas County Department of Environmental Management upon request. [Rule 62-297.310(8), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

#### Source Obligation

C.23. Specific conditions in Anclote Power Plant construction permit AC 09-202080, limiting the "engine hours" were accepted by the applicant to escape Prevention of Significant Deterioration review. If Florida Power Corporation requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(5), F.A.C., as though construction had not yet begun.

[Rule 62-212.400(2)(g), F.A.C.; and, Anclote Power Plant Permits AC 09-202080 and AO 09-205952.]

### Progress Energy Florida Higgins Power Plant

**C.24.** Florida Power Corporation shall notify the Department's district office and the local air program (when applicable) of where the diesel generator(s) is/are presently located and where the diesel generator(s) is/are to be relocated, in writing, at least 15 days prior to the date on which any diesel generator(s) is/are to be relocated. The notification shall specify the following:

- a. which generator(s), by serial number, is/are being relocated,
- b. which location the generator(s) is being relocated from and which location it is being relocated to, and

FINAL Permit No.: 1030012-004-AV

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c. the approximate startup date at the new location.

[Rule 62-4.070(3), F.A.C.; and, Anclote Power Plant Permit AC 09-202080]

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

### Section IV. This section is the Acid Rain Part.

Operated by: Florida Power

ORIS code: 630

### Subsection A. This subsection addresses Acid Rain, Phase II.

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

	<u> </u>	
E.U. ID No.	Description	
-001	Fossil Fuel Fired Steam Generator - SG 1	
-002	Fossil Fuel Fired Steam Generator - SG 2	
-003	Fossil Fuel Fired Steam Generator - SG 3	

**A.1.** The Phase II permit 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 unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

a. DEP Form No. 62-210.900(1)(a), dated July 30, 2002 [Chapter 62-213, and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2003	2004	2005	2006	2007
-001	1	SO2					. = 3 3 7
		allowances,					
		under Table	418*	418*	418*	418*	418*
		2 or 3 of 40					
,		CFR Part 73					
-002	2	SO2					
		allowances,					
		under Table	469*	469*	469*	469*	469*
		2 or 3 of 40		$K_{0,1}$			
		CFR Part 73	· :	, ,			
-003	3	SO2					
		allowances,					
		under Table	964*	964*	964*	964*	964*
		2 or 3 of 40					
		CFR Part 73					

<sup>\*</sup>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 or 3 of 40 CFR 73.

FINAL Permit No.: 1030012-004-AV Facility ID No.: 1030012

- **A.3.** Emission Allowances. 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.
- 1. 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.
- 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]
- **A.4.** Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C., Fast-Track Revisions of Acid Rain Parts. [Rules 62-213.413 and 62-214.370(4), F.A.C.]
- A.5. Comments, notes, and justifications: none
- **A.6.** Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

100 (100 ft) 100 ft) 1

### **Appendix H-1: Permit History**

Progress Energy Florida Higgins Power Plant

**Permit No.:** 1030012-004-AV

Facility ID No.: 1030012

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type <sup>1</sup>
All	Facility	1030012-001-AV	01/01/1998	12/31/2002	Title V Initial Permit
All	Facility	1030012-002-AV	01/01/2003	12/31/2007	Title V Renewal
		1030012-003-AC			Number not used
All	Facility	1030012-004-AV		12/31/2007	Title V Revision

Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).

### Appendix I-1: List of Insignificant Emissions Units and/or Activities.

Progress Energy Florida Higgins Power Plant Permit No.: 1030012-004-AV Facility ID No.: 1030012

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of	Brief Description of Emissions Units and/or Activities.								
1	Lube Oil System Vents								
2	Lube Oil Reservoir Tank								
3	Oil Water Separators								
4	Hazardous Waste Building								
5	Parts Washers/Degreasers								
6	Waste Oil Storage Tanks								
7	Luke Oil Storage Building								
8	Portable Unleaded Gasoline Tank								
9	Surface Coating and Solvent Cleaning								
10	No. 2 Diesel Fuel Tank								

#### Steam Generating Units - SAG 2, SAG 3, & SAG 4

Evaporation of on-site generated boiler non-hazardous cleaning chemicals (citrosolv and ammonia). This activity occurs once every three to five years or longer.

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### Appendix U-1: List of Unregulated Emissions Units and/or Activities.

Progress Energy Florida Higgins Power Plant FINAL Permit No.: 1030012-004-AV

Facility ID No.: 1030012

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

### E.U. ID

No.	Brief Description of Emiss	ions Units and/or Activity
-009	General Purpose Engines	
-010	Fuel Storage Tanks	
-011	Emergency Generator	•

### Table , Air Pollutant Emission Allowables and Terms

Progress Energy Florida Higgins Power Plant FINAL Permit ID No.: 1030012-004-AV

Facility ID No.: 1030012

E.U. ID Nos. Brief Description

-001 & -003	Fossil Fuel Fi	red Stea	m Generator - SG	1 & SG 3					
			Allowa	able Emission	ıs	Equivalent Er	missions		
Pollutant Name	Fuel(s)	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions Steady state Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	40% Opacity 60% Opacity					Rule 62-296.405(1)(a), F.A.C. Rule 62.210.700(3), F.A.C.	A.5 A.6
PM Emissions Steady State Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	0.1 lb/MMBtu 0.3 lb/MMBtu	54.8 164.4	240.0		*	Rule 62.296.405(1)(b), F.A.C. Rule 62.210.700(3), F.A.C.	A.7 A.8
Sulfur Dioxide	F.O. & OSUO or N.G.	8760 8760	2.75 lb/MMBtu, max. 2.5% S or 1 gr/100 dscf			1,507.0	6,600.7	Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(c)1.i., F.A.C.	A.9 A.10

-002	Fossil Fuel Fi	red Stèai	n Generators - SG	2		*	ą.	] ·	
				Allowable Emissions				1	
Pollutant Name	Fuel(s)	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions Steady state Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	40% Opacity 60% Opacity					Rule 62-296.405(1)(a), F.A.C. Rule 62.210.700(3), F.A.C. OGC Order TFR-92-A-01	A.5 a.6
PM Emissions Steady State Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	0.1 lb/MMBtu 0.3 lb/MMBtu	52.3 156.9	229.0			Rule 62.296.405(1)(b), F.A.C. Rule 62.210.700(3), F.A.C.	A.7 A.8
Sulfur Dioxide	F.O. & OSUO or N.G.	8760 8760	2.75 lb/MMBtu, max. 2.5% S or 1 gr/100 dscf			1,438.3	6,299.5	Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(c)1.i.,	A.9 A.10

<sup>\*</sup>Natural Gas (N.G.), No. 1, 2, 3, 4, 5, & 6 fuel oil (F.O.) and on-specification used oil (OSUO). OSUO is limited to 5% of the total heat input for these units (Cond. A.1 & A.34)

<sup>\*\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

### Table 1-1, Air Pollutant Emission Allowables and Terms

Progress Energy Florida Higgins Power Plant FINAL Permit ID No.: 1030012-004-AV

Facility ID No.: 1030012

### Additional Standards for On-Specification Used Oil (OSUO)

E.U. ID Nos. Brief Description

BICTID 1105		Tier Descripe							
-001-00	3 F	ossil Fuel Fire	d Steam Generators, SC	31, SG 2, & SG	3		Ž., Ž.		
	Allowable Emissions			Equivalent	Emissions				
Pollutant Name	Fuel(s)	Hours/ Year	Standards	lbs./ hour	TPY	lbs./hour	TPY	Regulatory Citation(s)	See Permit Condition(s)
Arsenic	OSUO		5.0 ppm			47.1%	*		A.33
Cadmium	OSUO		2.0 ppm						A.33
Chromium	OSUO		10.0 ppm						A.33
Lead	OSUO		100.0 ppm				*		A.33
Total Halogens	OSUO		1000 ppm			, ja , j , j , j			A.33
Flash Point	OSUO		≥ 100 degrees F				1		A.33
PCB	OSUO		≤ 49 ppm				,		A.33
SO <sub>2</sub>			max. 2.5% S by wt.			·			A.33

<sup>\*</sup> Burning of on-specification used oil shall not exceed 5 percent of the total heat input to units SG 1, SG 2, & SG 3 (Cond. A.1 & A.33). This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

<sup>\*\*</sup> Rules 62-4.070(3) and 62-213.440, F.A.C.; and, AO 52-216382, AO 52-216383, & AO 52-216384.

### Table, Air Pollutant Emission Allowables and Terms

Progress Energy Florida Higgins Power Plant FINAL Permit ID No.: 1030012-004-AV

Facility ID No.: 1030012

E.U. ID Nos. Brief Description

-004 & -005	Combusti	on Turbir	e Peaking Units - C	TP 1 & CTP 2	2				
			Allov	vable Emissions	3	Equivalent Em	issions *		
Pollutant Name	Fuel(s)	Hours/ Year	Standards	lb/ hour	TPY	lb/hour	TPY	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions	New No. 2 F.O.	8760	< 20% Opacity			,		Rule 62-296.320(4)(b)1., F.A.C.	B.5
Sulfur Dioxide	New No. 2 F.O. N.G	8760	max. 0.50% S by wt. or 1 gr/100 dscf			286.3	1253.9	Rule 62-213440, F.A.C.	B.6

-006 & -007									
			Allov	vable Emissions		Equivalent En	nissions		
Pollutant Name	Fuel(s)	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour	TPY	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions	New No. 2 F.O.	8760	< 20% Opacity					Rule 62-296.320(4)(b)1., F.A.C.	B.5
								•••	
Sulfur Dioxide	New No. 2 F.O. N.G.	8760	max. 0.50% S by wt. or 1 gr/100 dscf	1.1.		319.1	1397.5	Rule 62-213440, F.A.C.	B.6

<sup>\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

This table summarizes information for convenience purposes only and does not supersede any of the terms or conditions of this permit.

<sup>\*\*</sup> Based on a maximum F.O. consumption of 96.0 bbl/hr, 7.1 lb/gal, operating 8760 hr/yr., and maximum F.O. sulfur content of 0.50 %, by wt.

<sup>\*\*\*</sup> Based on a maximum F.O. consumption of 107.0 bbl/hr, 7.1 lb/gal, operating 8760 hr/yr., and maximum F.O. sulfur content of 0.50 %, by wt.

### Table 1-1, Air Pollutant Emission Allowables and Terms

Progress Energy Florida Higgins Power Plant FINAL Permit ID No.: 1030012-004-AV

Facility ID No.: 1030012

E.U. ID Nos. Brief Description

-7775047-001	-7775047-001 Relocatable Generator(s)								
			Allowable Emissions			Equivalent Emissi	ons		
Pollutant Name	Fuel(s)	Hours/	Standards	16/	TPY	lb/hour	, TPY	Regulatory Citation(s)	See Permit
	*	Year *		hour		* **	**		Condition(s)
Visible Emissions	#2 F.O.	8760	20% Opacity			-		Rule 62-296.320(4)(b)1., F.A.C.	C.6
Sulfur Dioxide	#2 F.O.	8760	0.50% by wt.			9		Rule 62-296.320(4)(b)1., F.A.C.	C.7

<sup>\*\*</sup> The "Equivalent Emissions" listed are for informational purposes only.

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Note: The above unit(s), which are permitted to be located at seven facilities.

### **Table 2-1, Compliance Testing Requirements**

Progress Energy Florida Higgins Power Plant Permit ID No.: 1030012-004-AV

Facility ID No.: 1030012

E.U. ID							
Pollutant Name or parameter	Fuel(s)	EPA/Reference Method	Testing Time or Frequency	Frequency Base Date <sup>2</sup>	Min. Compliance Test Time	CMS	Permit Condition(s)

E.U. CTP 1, 2, 3, & 4					
SO <sub>2</sub>	Oil	F.O. Analysis <sup>1</sup>	Per Delivery <sup>1</sup>	NA	B.12
VE	Oil	EPA Method 9	Annual	 1 Hour	B. 11,14,15, & 16

E.U. SG 2, 3,	<b>&amp;</b> 4			-	•		
SO <sub>2</sub> ·	Gas						\$ 1
	Oil	F.O. Analysis <sup>1</sup>	Per Delivery <sup>1</sup>				A.19 & 20
-PM	Gas			-		:	
	Oil	EPA Method 5	Annual		•		A.18, A.19, 24, & 28
VE	Gas	EPA Method 9	Annual		1 Hour		A.16, 17, 24, & 27

<sup>1-</sup> Sulfur content of the fuel oil shall be provided by the supplier or permittee for every delivery.

### Relocatable Diesel Generator(s)

E.U7775047 -0	001				
SO <sub>2</sub>	Oil	F.O. Analysis <sup>1</sup>	Per Delivery <sup>1</sup>	 NA	C.12
VE	Oil	EPA Meth. 9	Annual	1 Hour	C.13, 15, 17, & 18

Note: The above unit(s) are permitted to be located at seven facilities.

Higgins Power Plant

## **Attachment FAI-6**

Higgins Power Plant Compliance Report and Combustion Turbine Peaking Units CTP2 and CTP4 Compliance Plan



# Department of Environmental Protection

### **Division of Air Resources Management**

### STATEMENT OF COMPLIANCE - TITLE V SOURCE

Facility Owner/Company Name: Progress Energy Florida, Inc.

Site Na	ame: Higgins Plant County:	Pinellas
Title V	'Air Operation Permit No.: 1030012-004-AV	м <b>ч</b> е 
	REPORTING PERIOD	REPORT DEADLINE*
Jan	uary 1 through December 31 of 2006 (year)	March 1, 2007
*See R	ule 62-213.440(3)(a)2, F.A.C.	
COMP	PLIANCE STATEMENT (Check only one of the follow	ving three options)
<u>X</u>	A. This facility was in compliance with all terms and cond Permit and, if applicable, the Acid Rain Part, and there were a from applicable requirements associated with any malfunct burning or emission control equipment, or monitoring sy identified above.	no reportable incidents of deviations tion or breakdown of process, fuel
·	B. This facility was in compliance with all terms and cond Permit and, if applicable, the Acid Rain Part; however, t incidents of deviations from applicable requirements associate of process, fuel burning or emission control equipment, reporting period identified above, which were reported to the deviation, the following information is included:	there were one or more reportable ed with malfunctions or breakdowns or monitoring systems during the
	<ol> <li>Date of report previously submitted identifying the incide</li> <li>Description of the incident.</li> </ol>	ent of deviation.
	C. This facility was in compliance with all terms and cond Permit and, if applicable, the Acid Rain Part, EXCEPT those this report. For each item of noncompliance, the following in	e identified in the pages attached to
	<ol> <li>Emissions unit identification number.</li> <li>Specific permit condition number.</li> <li>Description of the requirement of the permit condition.</li> <li>Basis for the determination of noncompliance (for monitor monitoring was continuous, i.e., recorded at least every 1</li> <li>Beginning and ending dates of periods of noncompliance</li> <li>Identification of the probable cause of noncompliance an preventative measures implemented.</li> </ol>	5 minutes, or intermittent).

Dates of any reports previously submitted identifying this incident of noncompliance.

1

DEP Form No. 62-213.900(7)

Effective:

### STATEMENT OF COMPLIANCE - TITLE V SOURCE

# RESPONSIBLE OFFICIAL CERTIFICATION I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., 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)	2/13/07 (Date)
	. <del>v•c</del>

### **DESIGNATED REPRESENTATIVE CERTIFICATION** (only applicable to Acid Rain source)

Title:

Plant Manager

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.

	ure of Acid Rain Source Designated Representative)		2/12/07
(Signati	ire of Acid Rain Source Designated Representative)		(Date)
Name:	J. Michael Kennedy	Title:	Principal Environmental Specialist

{Note: Attachments, if required, are created by the responsible official or the designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by the 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. EPA (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

Name:

David Fernandes

Progress Energy Florida Higgins Combustion Turbines - January 1, 2006 thru June 30, 2006 Malfunction Events

During the first two quarters of calendar year 2006, no deviations occurred for Unit No. 1 No. 2, No. 3, and No. 4.

<u>Date Time Duration Parameter Description</u>

None to report for the first two quarters of 2006

Progress Energy Florida Higgins Combustion Turbines - July 1, 2006 thru December 31, 2006 Malfunction Events

During the last two quarters of calendar year 2006, no deviations occurred for Unit No. 1 No. 2, No. 3, and No. 4.

<u>Date</u> <u>Time</u> <u>Duration</u> <u>Parameter</u> <u>Description</u>

None to report for the last two quarters of 2006

### Attachment FAI-6

Combustion Turbine Peaking Units CTP2 and CTP4 Compliance Plan Higgins Power Plant

Per Specific Condition B.16 of the Florida Power Corporation dba Progress Energy Florida, Inc. ("PEF") Higgins Power Plant Title V Permit No. 1030012-004-AV, the annual visible emissions ("VE") compliance test is not required if burning gaseous fuels or less than 400 hours per year of liquid fuels. However per Specific Condition B.15, a VE compliance test is required once every five (5) years for any combustion turbine that operates less than 400 hours per year.

The Combustion Turbine Peaking Units CTP2 and CTP4 (Emissions Unit Nos. -005 and -007, respectively), have operated on distillate oil for less than 5 hours per year if at all since the year 2002. Therefore an annual VE compliance test has not been required. However In December 2003, a VE compliance test was performed while burning oil and showed that all the combustion turbines were in compliance. This test was associated with the previous Title V permit renewal.

PEF has completed the VE test for oil burning for units CTP1 and CTP3 (see Appendix CTP-4), but an operational problem has prevented oil burning in units CTP2 and CTP4. PEF is unable to rectify the problem prior to the Title V Permit Renewal Application submittal deadline of July 5, 2007. Repair work has been scheduled to begin in late 2007 or early 2008.

Therefore, PEF will perform a VE test on these units within 90 days of repairing the oil burning problem. The compliance authority, Pinellas County AQD, will be notified of the planned test per the applicable notification requirements of at least 15 days.

### Higgins Power Plant

## **Attachment FAI-7**

Acid Rain Retired Unit Exemption Forms and Requested Changes to Current Title V Air Operation Permit

# **Retired Unit Exemption**

	For more information, see in	structions and refer to	Rule 62-214.	.340(2), F.A.C., and 40	0 CFR 72.8	
	This submission is:	New		Revised		Page
TEP 1 lentify the unit by plant name, tate, ORIS code and unit ID#.	Higgins			Florida	0630	1
	Plant Name			State	ORIS Code	Unit ID#
					<u> </u>	•
STEP 2	<b>₹</b>					
dentify the first full calendar year i which the unit meets (or will meet) requirements of Rule 62-214.340(2)	the January 1, 2007.					
F.A.C.	(a),				e for the second content of the second	
STEP 3	Special Provisions					

Read the special provisions.

- (1) A unit exempt under Rule 62-214.340(2), F.A.C., shall not emit any sulfur dioxide and nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with 40 CFR part 73 subpart B. If the unit is a Phase I unit, for each calendar year in Phase I, the designated representative of the unit shall submit a Phase I permit application in accordance with 40 CFR part 72 subparts C and D and an annual certification report in accordance with 40 CFR 72.90 through 72.92 and is subject to 40 CFR 72.95 and 72.96.
- (2) A unit exempt under Rule 62-214.340(2), F.A.C., shall not resume operation unless the designated representative of the source that includes the unit submits a complete Acid Rain part application under Rule 62-214.320, F.A.C., for the unit not less than 24 months pnor to the date on which the unit is first to resume operation.
- (3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(2), F.A.C., shall comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all penods for which the exemption is not in effect, even if such requirements anse, or must be complied with, after the exemption takes effect.
- (4) For any penod for which a unit is exempt under Rule 62-214.340(2), F.A.C., the unit is not an Acid Rain unit and is not eligible to be an opt-in source under 40 CFR part 74. As a non-Acid Rain Unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR part 70.
- (5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(2), F.A.C., shall retain at the source that includes the unit records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time pnor to the end of the period, in writing by the EPA or the Department. The owners and operators bear the burden of proof that the unit is permanently retired.
- (6) On the earlier of the following dates, a unit exempt under Rule 62-214.340(2), F.A.C., shall lose its exemption and become an Acid Rain Unit: (i) the date on which the designated representative submits an Acid Rain part application under paragraph (2); or (ii) the date on which the designated representative is required under paragraph (2) to submit an Acid Rain part application. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under Rule 62-214.340(2), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

Read the appropriate certification and sign and date.

#### Certification (for designated representatives only)

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

Name <b>J</b> .	Michael Kennedy	
Signature	J. Michael X 4	Date 6/11/07

STEP 4, cont'd.
Read the appropriate
certification and sign
and date

Plant Name (from Step 1) Higgins	Retired Unit Exemption Page 2
Certification (for certifying officials only)  I certify under penalty of law that I have personally examined, and an document and all its attachments. Based on my inquiry of those indicertify that the statements and information are to the best of my know are significant penalties for submitting false statements and informations in the possibility of fine or imprisonment.	viduals with primary responsibility for obtaining the information, I vledge and belief true, accurate, and complete. I am aware that there
Name	
Signature	Date
Certification (for additional certifying officials, if applicable)  I certify under penalty of law that I have personally examined, and an document and all its attachments. Based on my inquiry of those indivicertify that the statements and information are to the best of my know are significant penalties for submitting false statements and information possibility of fine or imprisonment.	viduals with primary responsibility for obtaining the information, I vledge and belief true, accurate, and complete. I am aware that there

Name	
Signature	Date

### Certification (for additional certifying officials, if applicable)

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

Name	
Signature	Date

# **Acid Rain Program**

# **Instructions for Retired Unit Exemption**

Form (Rule 62-214.340(2), F.A.C., and 40 CFR 72.8)

The Acid Rain regulations provide that an Acid Rain unit that is permanently retired is exempted from the requirements to obtain a Phase II acid rain part, monitor emissions, and hold allowances, except for requirements concerning reduced utilization in Phase I (1995-1999). The designated representative or certifying official(s) of such a unit must submit the Retired Unit Exemption form. The provisions governing the retired unit exemption are found at Rule 62-214.340(2), F.A.C.

Please type or print. If assistance is needed, contact the title V permitting authority.

STEP 1 Use the plant name and ORIS code listed on the Certificate of Representation (if any) for the Acid Rain source. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If there is uncertainty regarding what the code number is, contact EIA at (202) 426-1234 (for ORIS codes), or (202) 426-1269 (for facility codes).

Identify the Acid Rain unit by providing the appropriate unit identification number. The identification number entered for the unit should be consistent with the Certificate of Representation (if any) for the Acid Rain source, with the unit identification numbers listed in NADB (for units that commenced operation prior to 1993), and with the unit identification number used in reporting to DOE and/or EIA. NADB is the National Allowance Data Base for the Acid Rain Program, and can be downloaded from the Acid Rain Program Website at "www.epa.gov/acidrain/" or obtained on diskette by calling the Acid Rain Hotline at (202) 564-9620. This data file is in dBase format for use on an IBM-compatible PC and requires 2 megabytes of hard drive memory.

- STEP 2 Enter the first full calendar year in which the unit is permanently retired. The exemption becomes effective January 1 of that year, but the unit may lose the exemption as provided in 40 CFR 72.8(d)(6).
- STEP 4 For a unit for which a designated representative has been authorized, the designated representative or alternate designated representative must read, sign, and date the certification at STEP 4 labeled "for designated representatives only" and submit this form.

If no designated representative has been authorized, a certifying official for each owner of the unit must read, sign, and date the certification at STEP 4 labeled "for certifying officials only" and submit this form. A certifying official is not required to submit a Certificate of Representation. If there is more than one owner of a unit for which no designated representative has been authorized, each owner of the unit must have a certifying official sign the appropriate certification at STEP 4.

### **Submission Deadlines**

The form must be submitted by December 31 of the first year in which the unit is to be exempt.

#### **Submission Instructions**

Submit this form and 1 copy to the appropriate title V air permitting authority and a copy to:

U.S. Environmental Protection Agency Acid Rain Program (6204J) Attn: Retired Unit Exemption 401 M St., SW Washington, DC 20460.

If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.

DEP Form 62-210.900(1)(a)3. - Instructions

Effective: 4-16-01

# **Retired Unit Exemption**

This submission is:

Higgins

STEP 1

Identify the unit by plant name,

State, ORIS code and unit ID#.

For more information, see instructions and refer to Rule 62-214.340(2), F.A.C., and 40 CFR 72.8

Florida

0630

Page 1

2

L Pla	int Name	State	ORIS Code	Unit ID#
STEP 2 Identify the first full calendar year in which the unit meets (or will meet) the requirements of Rule 62-214.340(2)(a), F.A.C.	January 1, <u>2007</u> .			
STEP 3 Read the special provisions.	(1) A unit exempt under Rule 62-214.340(2), F.A.C., shall not emit exemption takes effect. The owners and operators of the unit will If the unit is a Phase I unit, for each calendar year in Phase I, the capplication in accordance with 40 CFR part 72 subparts C and D a through 72.92 and is subject to 40 CFR 72.95 and 72.96. (2) A unit exempt under Rule 62-214.340(2), F.A.C., shall not resu includes the unit submits a complete Acid Rain part application unit to the date on which the unit is first to resume operation. (3) The owners and operators and, to the extent applicable, the de F.A.C., shall comply with the requirements of Chapter 62-214, F.A exemption is not in effect, even if such requirements arise, or must (4) For any period for which a unit is exempt under Rule 62-214.34 opt-in source under 40 CFR part 74. As a non-Acid Rain Unit, the under 40 CFR part 70. (5) For a period of 5 years from the date the records are created, the F.A.C., shall retain at the source that includes the unit records der keeping records may be extended for cause, at any time pnor to the owners and operators bear the burden of proof that the unit is perf (6) On the earlier of the following dates, a unit exempt under Rule Rain Unit: (i) the date on which the designated representative sub on which the designated representative is required under paragrap applying monitoring requirements under 40 CFR part 75, a unit that as a new unit that commenced commercial operation on the first displacements.	be allocated allowances in accordesignated representative of the and an annual certification report time operation unless the designated representative of a unit. C., and the Acid Rain Program of the complied with, after the exert 40(2), F.A.C., the unit is not an Aunit shall continue to be subject the owners and operators of a unit on the acid Rain permanently retired.  62-214.340(2), F.A.C., shall lose mits an Acid Rain part application of (2) to submit an Acid Rain part application of (2) to submit an Acid Rain part application of (2) to submit an Acid Rain part aloses its exemption under Rule	rdance with 40 CFR unit shall submit a P in accordance with a lated representative of the unit not less that exempt under Rule concerning all period nation takes effect. Cid Rain unit and is to any other applicabilit exempt under Rulinently retired. The street is exemption and but nunder paragraph (in application. For the 62-214.340(2), F.A.	part 73 subpart B. hase I permit 40 CFR 72.90 of the source that n 24 months prior 62-214.340(2), is for which the not eligible to be an ble requirements e 62-214.340(2), 5-year period for partment. The decome an Acid 2); or (ii) the date e purpose of
STEP 4 Read the appropriate certification and sign and date.	Certification (for designated representatives only)  I am authorized to make this submission on behalf of the owners a submission is made. I certify under penalty of law that I have pers submitted in this document and all its attachments. Based on my information, I certify that the statements and information are to the aware that there are significant penalties for submitting false stater including the possibility of fine or imprisonment.	onally examined, and am familia inquiry of those individuals with p best of my knowledge and belie	r with, the statement orimary responsibility f true, accurate, and	ts and information for obtaining the complete. I am
	Name J. Michael Kennedy Signature	,	Date Co./u/	67

Plant Name (from Step 1) Higgins	Retired Unit Exemption
піууніз	Page 2

STEP 4, cont'd.
Read the appropriate
certification and sign
and date.

Certification (	for certifying	officials only)

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

Name	
Signature	Date

### Certification (for additional certifying officials, if applicable)

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

Name	
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Name	
Signature	Date

# **Acid Rain Program**

# **Instructions for Retired Unit Exemption**

Form (Rule 62-214.340(2), F.A.C., and 40 CFR 72.8)

The Acid Rain regulations provide that an Acid Rain unit that is permanently retired is exempted from the requirements to obtain a Phase II acid rain part, monitor emissions, and hold allowances, except for requirements concerning reduced utilization in Phase I (1995-1999). The designated representative or certifying official(s) of such a unit must submit the Retired Unit Exemption form. The provisions governing the retired unit exemption are found at Rule 62-214.340(2), F.A.C.

Please type or print. If assistance is needed, contact the title V permitting authority.

STEP 1 Use the plant name and ORIS code listed on the Certificate of Representation (if any) for the Acid Rain source. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If there is uncertainty regarding what the code number is, contact EIA at (202) 426-1234 (for ORIS codes), or (202) 426-1269 (for facility codes).

Identify the Acid Rain unit by providing the appropriate unit identification number. The identification number entered for the unit should be consistent with the Certificate of Representation (if any) for the Acid Rain source, with the unit identification numbers listed in NADB (for units that commenced operation prior to 1993), and with the unit identification number used in reporting to DOE and/or EIA. NADB is the National Allowance Data Base for the Acid Rain Program, and can be downloaded from the Acid Rain Program Website at "www.epa.gov/acidrain/" or obtained on diskette by calling the Acid Rain Hotline at (202) 564-9620. This data file is in dBase format for use on an IBM-compatible PC and requires 2 megabytes of hard drive memory.

- STEP 2 Enter the first full calendar year in which the unit is permanently retired. The exemption becomes effective January 1 of that year, but the unit may lose the exemption as provided in 40 CFR 72.8(d)(6).
- STEP 4 For a unit for which a designated representative has been authorized, the designated representative or alternate designated representative must read, sign, and date the certification at STEP 4 labeled "for designated representatives only" and submit this form.

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#### **Submission Deadlines**

The form must be submitted by December 31 of the first year in which the unit is to be exempt.

#### Submission Instructions

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U.S. Environmental Protection Agency Acid Rain Program (6204J) Attn: Retired Unit Exemption 401 M St., SW Washington, DC 20460.

If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.

DEP Form 62-210.900(1)(a)3. - Instructions Effective: 4-16-01

# **Retired Unit Exemption**

This submission is:

STEP 1

For more information, see instructions and refer to Rule 62-214.340(2), F.A.C., and 40 CFR 72.8

Page 1

Identify the unit by plant name, State, ORIS code and unit ID#.	Higgins	Florida	0630	3
	Plant Name	State	ORIS Code	Unit ID#
STEP 2 Identify the first full calendar year in which the unit meets (or will meet) th requirements of Rule 62-214.340(2)(a F.A.C.				
STEP 3 Read the special provisions.	(1) A unit exempt under Rule 62-214.340(2), F.A.C., shall not exemption takes effect. The owners and operators of the unit if the unit is a Phase I unit, for each calendar year in Phase I, tapplication in accordance with 40 CFR part 72 subparts C and through 72.92 and is subject to 40 CFR 72.95 and 72.96.  (2) A unit exempt under Rule 62-214.340(2), F.A.C., shall not includes the unit submits a complete Acid Rain part application to the date on which the unit is first to resume operation.  (3) The owners and operators and, to the extent applicable, th F.A.C., shall comply with the requirements of Chapter 62-214, exemption is not in effect, even if such requirements arise, or r (4) For any period for which a unit is exempt under Rule 62-21 opt-in source under 40 CFR part 74. As a non-Acid Rain Unit, under 40 CFR part 70.  (5) For a period of 5 years from the date the records are create F.A.C., shall retain at the source that includes the unit records keeping records may be extended for cause, at any time prior owners and operators bear the burden of proof that the unit is (6) On the earlier of the following dates, a unit exempt under Rain Unit: (i) the date on which the designated representative on which the designated representative is required under para applying monitoring requirements under 40 CFR part 75, a unit as a new unit that commenced commercial operation on the fin	will be allocated allowance the designated representation of the period of the period of the unit of t	s in accordance with 40 CFR ive of the unit shall submit a Fion report in accordance with the designated representative of A.C., for the unit not less that the designated representative of A.C., for the unit not less that the e of a unit exempt under Rule Program concerning all period or the exemption takes effect. It is not an Acid Rain unit and is the subject to any other applicators of a unit exempt under Rule tis permanently retired. The writing by the EPA or the Depth shall lose its exemption and the application under paragraph (all Rain part application. For the Inder Rule 62-214.340(2), F.A.	part 73 subpart B. Phase I permit 40 CFR 72.90 of the source that an 24 months prior e 62-214.340(2), ds for which the not eligible to be an able requirements le 62-214.340(2), 5-year period for partment. The become an Acid (2); or (ii) the date he purpose of
STEP 4 Read the appropriate certification and sign and date.	Certification (for designated representatives only)  I am authorized to make this submission on behalf of the owne submission is made. I certify under penalty of law that I have is submitted in this document and all its attachments. Based on information, I certify that the statements and information are to aware that there are significant penalties for submitting false including the possibility of fine or imprisonment.  Name J. Michael Kennedy  Signature	personally examined, and a my inquiry of those individu the best of my knowledge tatements and information	am familiar with, the statemen uals with primary responsibility and belief true, accurate, and	ts and information y for obtaining the d complete. I am ts and information,

Plant Name (from Step 1)	Retired Unit Exemption
Higgins	

Page 2

STEP 4, cont'd. Read the appropriate certification and sign and date.

Certification (	for certifying	officials <u>on</u>	ly)
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I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	
Signature	Date

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Name	
Signature	Date

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Name		
Signature		Date

# **Acid Rain Program**

## **Instructions for Retired Unit Exemption**

Form (Rule 62-214.340(2), F.A.C., and 40 CFR 72.8)

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Please type or print. If assistance is needed, contact the title V permitting authority.

STEP 1 Use the plant name and ORIS code listed on the Certificate of Representation (if any) for the Acid Rain source. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If there is uncertainty regarding what the code number is, contact EIA at (202) 426-1234 (for ORIS codes), or (202) 426-1269 (for facility codes).

Identify the Acid Rain unit by providing the appropriate unit identification number. The identification number entered for the unit should be consistent with the Certificate of Representation (if any) for the Acid Rain source, with the unit identification numbers listed in NADB (for units that commenced operation prior to 1993), and with the unit identification number used in reporting to DOE and/or EIA. NADB is the National Allowance Data Base for the Acid Rain Program, and can be downloaded from the Acid Rain Program Website at "www.epa.gov/acidrain/" or obtained on diskette by calling the Acid Rain Hotline at (202) 564-9620. This data file is in dBase format for use on an IBM-compatible PC and requires 2 megabytes of hard drive memory.

- STEP 2 Enter the first full calendar year in which the unit is permanently retired. The exemption becomes effective January 1 of that year, but the unit may lose the exemption as provided in 40 CFR 72.8(d)(6).
- STEP 4 For a unit for which a designated representative has been authorized, the designated representative or alternate designated representative must read, sign, and date the certification at STEP 4 labeled "for designated representatives only" and submit this form.

If no designated representative has been authorized, a certifying official for each owner of the unit must read, sign, and date the certification at STEP 4 labeled "for certifying officials only" and submit this form. A certifying official is not required to submit a Certificate of Representation. If there is more than one owner of a unit for which no designated representative has been authorized, each owner of the unit must have a certifying official sign the appropriate certification at STEP 4.

#### **Submission Deadlines**

The form must be submitted by December 31 of the first year in which the unit is to be exempt.

### **Submission Instructions**

Submit this form and 1 copy to the appropriate title V air permitting authority and a copy to:

U.S. Environmental Protection Agency Acid Rain Program (6204J) Attn: Retired Unit Exemption 401 M St., SW Washington, DC 20460.

If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.

DEP Form 62-210.900(1)(a)3. - Instructions Effective: 4-16-01

# Certificate of Representation Report 05/30/2007

### acility Information

Facility ID (ORISPL): 630

Facility Higgins

State: FL

County: Pinellas

EPA AIRS ID:

**Latitude: 28.0002** 

**Longitude:** 82.3946

Facility Detail (Mini Detail)

### Representative Information

Name: J Michael Kennedy

Company: Progress Energy Corporation

Title: Principal Environmental Specialist

Address: P O Box 14042

MAC - CX1B

City: St. Petersburg State: FL Zip: 33733

Phone: (727) 820-5567 Fax: (727) 820-5229

Email: j-michael.kennedy@pgnmail.com

People Detail Layout (Multiple)

### **Current Representatives**

Program	Primary Representative, Effective Date	Alternate, Effective Date	Primary Representative, End Date	Alternate, End Date
ARP	J Michael Kennedy, 10/27/2000	None		Brenda Brickhouse, 05/30/2007
CAIRNOX	J Michael Kennedy, 05/30/2007	None		
CAIROS	J Michael Kennedy, 05/30/2007	None		
CAIRSO2	J Michael Kennedy, 05/30/2007	None		

Basic Table Layout

#### Units

	Unit ID	Program	Unit Classification	Operating Status		Source Category	NAICS Code	Commence Operation Date	Commence Operation Date Code	Comm. Commercial Operation Date	Comme Comme Opera Date C
	_	ARP	Phase 2	Shutdown						05/01/1951	Α
	2	ARP	Phase 2	Shutdown						05/01/1953	Α
[	3	ARP	Phase 2	Shutdown						12/01/1953	Α
	P1	CAIRNOX	Affected	Operating	СТ	Electric	Fossil fuel	03/15/1969	Α	03/15/1969	Α

CCI	incate of in	epresentant	on Keport						га	ge z oi
					Utility	electric power generation				
P1	CAIROS	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	03/15/1969	А	03/15/1969	A
P1	CAIRSO2	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	03/15/1969	А	03/15/1969	A
P2	CAIRNOX	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	04/12/1969	A	04/12/1969	A
P2	CAIROS	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	04/12/1969	A	04/12/1969	A
P2	CAIRSO2	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	04/12/1969	А	04/12/1969	A
P3	CAIRNOX	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	12/01/1970	A	12/01/1970	A
P3	CAIROS	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	12/01/1970	А	12/01/1970	A
P3	CAIRSO2	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	12/01/1970	A	12/01/1970	A
P4	CAIRNOX	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	01/09/1971	Α	01/09/1971	A
P4	CAIROS	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation	01/09/1971	A	01/09/1971	A
P4	CAIRSO2	Affected	Operating	СТ	Electric Utility	Fossil fuel electric power generation		А	01/09/1971	A

Basic Table Layout

### **Generator Information**

Generator ID	Unit ID	ARP Nameplate Capacity	CAIR Nameplate Capacity	Effective Date
P1	P1		37.0	05/01/2007
P2	P2		37.0	05/01/2007
P3	P3		43.0	05/01/2007
P4	P4		43.0	05/01/2007

Basic Table Layout

## **Current Owners and Operators**

Unit ID	Owner/Operator Company Name	Туре	Effective Date	End Date
1	Florida Power Corporation	Owner/Operator	03/07/2003	
2	Florida Power Corporation	Owner/Operator	03/07/2003	
3	Florida Power Corporation	Owner/Operator	03/07/2003	
P1	Progress Energy Corporation	Owner/Operator	05/01/2007	
P2	Progress Energy Corporation	Owner/Operator	05/01/2007	
P3	Progress Energy Corporation	Owner/Operator	05/01/2007	
P4	Progress Energy Corporation	Owner/Operator	05/01/2007	

Basic Table Layout

### Attachment FAI-7

# Requested Changes to Current Title V Air Operation Permit Higgins Power Plant

- 1. Emissions Unit Nos. -001, -002, and -003 (Fossil Fuel Fired Steam Generators SG 1, SG 2, and SG 3, respectively) were torn down on and therefore permanently shutdown on October 20, 2006. Permit conditions, descriptions, and other references to these emissions units should be removed from the permit.
- 2. Update the list of unregulated emissions units and/or activities in Appendix U-1 of the Title V Permit by removing the unregulated emissions units' general purpose engines (EU No. -009) and emergency generator (EU No. -011). They no longer exist at the Higgins Power Plant.
- 3. Correct typographical error in Specific Condition B.12. for the Combustion Turbine Peaking Units as follows (Changes are highlighted in strikethrough/underline format.):
  - **B.12.** The fuel sulfur content, percent by weight, provided by the vendor or permittee for each delivery of liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the <u>later</u> editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b) (10) is acceptable.

[Rules 62-213.440 and 62-297.440, F.A.C.]

- 4. Correct typographical error in Specific Condition C.4. for the Relocatable Diesel Fired Generator(s) as follows (Changes are highlighted in strikethrough/underline format.):
  - **C.4.** Methods of Operation Fuels. Only new low sulfur No. 2 fuel oil shall be fired in the combustion turbine(s) these units. [Rule 62-213.410, F.A.C.]
- 5. Change the list of insignificant emissions units and/or activities in Appendix I-1 to reflect the updated information provided in Attachment FAI-4 of this Title V permit renewal application.
- 6. Per Specific Condition B.14, the minimum period of observation for the visible emissions (VE) compliance test is 60 minutes for emissions units which emit or have potential to emit (PTE) greater than or equal to 100 TPY particulate matter (PM). For the emissions unit with a PTE less than 100 TPY, the VE compliance test minimum duration is 30 minutes.

Based on the permitted capacity in Specific Condition B.1 and Total PM emission factor of 0.012 lb/mmBTU (AP42 Table 3.1-2a), the PTE for each emissions unit (EU Nos. -004, -005, -006 and -007) is less than 100 TPY. Therefore, this makes the minimum VE test duration 30 minutes.

However, Table 2.1, Compliance Testing Requirements indicates a minimum VE compliance test duration of 1 hour for EU Nos. -004, -005, -006 and -007. Please correct Table 2.1 to reflect a 30 minute VE compliance test minimum duration for these emissions units.

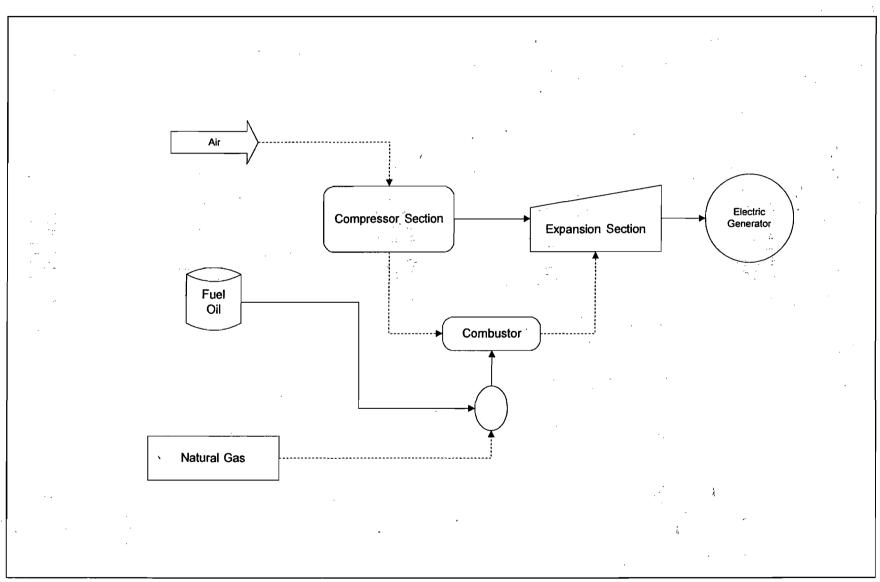
Higgins Power Plant

# **Attachment CTP-1**

Combustion Turbine Peaking Units Process Flow Diagram

Higgins Power Plant

Attachment CTP-1: Combustion Turbine Peaking Units – Process Flow Diagram



Higgins Power Plant

# **Attachment CTP-2**

Combustion Turbine Peaking Units Fuel Analysis or Specification

# **Laboratory Services**

5012 Causeway Blvd \* Tampa Fl. 33619 \* Rh (813)630-7378 \* Fax (813)630-7360 \* DOH #E54272

eport For: Jody Godsey-Baur, Progress Energy Florida

100 Central Avenue - MAC BT11 St. Petersburg, FL 33701

Report Date: 1/22/2007

Laboratory ID:

AA86224

Location Code:

PEI-#2-HIGGINS

jody.godsey-baur@pgnmail.com

Route To:

Progress Energy - Higgins, Progress Energy - Admin

#### Sample Information

Description: #2 Oil, Higgins GT, Progress Energy Inc.

Project Account Code: 01

Sample Collection Method: Sampled by Customer

UNIT NUMBER: Fuel Tank #1

Sampled By:

ROBERT SCALLIONS

Date and Time Collected: 1/5/2007 9:16:00 AM

Date of Sample Receipt:

1/5/2007

SAMPLE TYPE: GAS TURBINE

#### Laboratory Results

PARAMETER	Result	Units	MDL	Qual Code	Test Method	Analyst	Analysis Date & Time	Lower Limit	Úpper Limit	Violation Check
API Gravity @ 60 Deg. F	34.9	Degrees API	0.1		ASTM D5002	PJ	01/08/07 11:35			
Carbon, Hydrogen, and Nitrogen in Oll										
Carbon	86.9	%.			ASTM 5291	MM	01/15/07 11:00			
Hydrogen	12.2.	%			ASTM 5291	МM	01/15/07 11:00			
Nitrogen	< 0.2	%.	0.2	U.	ASTM 5291	МM	01/15/07 11:00			
Density @ 15 C (59 F)	0.8499	kġ/L	0:0001		ASTM Table3	ΜМ	01/17/07 11:33			
Gross Heal of Combustion, Oils, (HHV)	5760468	BTU/Barrel	11		Calculation	ŔΊ	01/15/07 09:04			
oss Heat of Combustion; Oils, (HHV)	137154	BŤU/Gal.	Ĩ1		Calculation	ĖĴ	01/15/07 09:04	137000		
cross Heat of Combustion, Oils; (HHV)	19372	BTŲ/Lb.,	1		ASTM D-240	ВÚ	.01/11/07 11:00			
Net Heat of Combustion, Oils, (LHV)	5429508	BTU/Barrel	į		Calculation	MM	01/17/07 11:32			
Net Heat of Combustion, Oils, (LHV)	129274	BTU/Gal.	'n		Galculation	МM	01/17/07 11:32			
Net Heat of Combustion Olls (LHV)	18259	BTU/Lb.	<b>%</b> 1		ASTM D-240	ΜM·	01/17/07 11:32			
Pounds / Gallon @ 60 Deg. F	7:080	Lbs:/Gal.	0.001		ASTM D 1250-80	PJ	01/08/07 12:08		9.5	
Relative Density 60/60 Deg: F	0.8504		0.0001		ASTM D-1298	PJ	01/08/07 12:08		•	
Sulfur in Petroleum Products	0,45	%;	0.01		ASTM D-1552	EMD	01/08/07-11:55		0:5	

#### Comments

#### Data Qualifier Codes Explanation:

U - Indicates that the compound was analyzed for but not detected.

Should there be any questions regarding this report, please contact:

Robert Dorey,

Manager, Laboratory Services

(813) 630-7378

Analyses reported by this laboratory are based upon material supplied by the client. Laboratory Services does not imply that the contents of the sample received by this laboratory. ame as all such material in the environment from which the sample was taken. Our results relate only to the sample or samples as tested. Tampa Electric assumes no responsib makes no warranty or representation, express or implied, as to the suitability of the sample material for any specific use;

Report Number: AA86224-012207-08

Higgins Power Plant

# **Attachment CTP-3**

Combustion Turbine Peaking Units Startup and Shutdown Procedures

#### **Attachment CTP-3**

Procedures for Startup and Shutdown Combustion Turbine Peaking Units Higgins Power Plant

#### Startup

The startup for the combustion turbines at the Higgins Power Plant begins with an electric control system using a switch to initiate the unit's startup cycle. The generator is synchronized with the grid and can be on-line (electrical power production) within 5 minutes of startup.

The combustion turbine peaking units have no emissions controls. If excess emissions are encountered during any startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective action taken or preventative measures adopted. Corrective actions may include but not limited to switching the unit from automatic (remote) to local control. Best Operating Practices are adhered to and all efforts are undertaken to minimize both the level and duration of such excess emissions.

#### Shutdown

Shutdown of the combustions turbine peaking units is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the generator from the electrical grid), shutting of the fuel, and coasting to a stop.

Higgins Power Plant

# **Attachment CTP-4**

Combustion Turbine Peaking Units Compliance Test Report

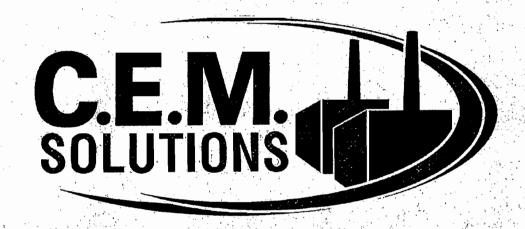
# Air Emissions Compliance Report

Completed for:

Progress Energy Florida, Inc.
Higgins Power Plant
Units CTP-1 and CTP-3

Test Report Number: 20-2907-0103-001

Testing Completed: May 29, 2007



## **Air Emissions Compliance Test Report**

Progress Energy Florida, Inc.
Higgins Power Plant
Combustion Turbine Peaking Units
CTP-1 and CTP-3
Oldsmar, Florida

C.E.M. Solutions Project No. 2907

Testing Completed: May 29, 2007

C.E.M. Solutions, Inc Report Number: 20-2907-0103-001

C.E.M. Solutions, Inc. 1183 E. Overdrive Circle Hernando, FL 34442 Phone: 352-489-4337

# Plant's Authorization and Validity Statement

I hereby certify that to the best of my knowledge, all applicable field procedures and calculations comply with Florida Department of Environmental Protection requirements, and all test data and plant operating data are true and correct.

David Fernandes

Plant Manager

Date

## **Statement of Validity**

I hereby certify the information and data provided in this emissions test report for tests performed at Progress Energy Florida's Higgins facility, on units CTP-1 and CTP-3 conducted on May 29, 2007 are complete and accurate to the best of my

knowledge.

peremy Jøhnson

Rresident

C.E.M. Solutions, Inc.

## **Project Background**

Name of Source Owner:

Progress Energy Florida, Inc.

Address of Owner:

299 First Avenue North

St. Petersburg, Florida 33701

Source Identification:

Facility ID: 1030012

Emissions Unit: CTP-1 and CTP-3 (EU: -004 and -006)

Location of Source:

Pinellas County, Florida

Type of Operation:

SIC Code: 4911

Tests Performed:

Method 9 - Visual Determination of Opacity

ASTM D-240 - Fuel Analysis (by others)

ASTM D-1552 - Sulfur in Petroleum Products (by others)

Test Supervisor:

Brian Kimball

Date(s) Tests Conducted:

May 29, 2007

Site Test Coordinator:

Ann Quillian

State Regulatory Observers:

No Observers Present

# **C.E.M. Solutions, Inc Test Personnel**

Project Field Manager: Brian Kimball

Field Technician: Shannon Stewart

# **Table of Contents**

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#### 1.0 Introduction

Progress Energy Florida, Inc. (PEF) retained C.E.M. Solutions, Inc. to perform source emissions testing on two of the combustion turbine peaking units (CTP-1 and CTP-3) located at its Higgins Power Plant in Oldsmar, Florida.

The test program was conducted in order to evaluate the compliance status of the combustion turbines' exhaust, while firing No.2 distillate fuel oil, with respect to Title V air operating permit number 1030012-004-AV. The test program and results are presented and discussed in this report.

Ann Quillian of Progress Energy Florida's Environmental Services Section coordinated plant operations throughout the test program. All testing was conducted in accordance with test methods promulgated by the USEPA.

CTP-1 passed the Visual Emissions Test with an average of 5.0% opacity while firing No. 2 distillate fuel oil. CTP-3 passed the Visual Emissions Test with an average of 6.0% while firing No. 2 distillate fuel oil. Fuel analysis showed the No. 2 fuel oil used during the test had a Sulfur content of 0.45% by weight, passing the 0.5% criteria.

C.E.M. Solutions, Inc.

Report: 20-2907-0103-001

Last Updated: June 11, 2007

#### 2.0 Facility Description

The PEF Higgins Power Plant has four combustion turbine peaking units, CTP-1 through CTP-4. The visible emissions testing was performed on two of the four units, CTP-1 and CTP-3. CTP-1 powers a generator rated at 37.0 MW and CTP-3 a 42.9 MW rated generator.

#### 2.1 Process Equipment

CTP-1 has a maximum heat input rating of 566 MMbtu/hour at 59 °F. CTP-3 has a maximum heat input rating of 631MMBtu/hr at 59 °F. Emissions from the combustion turbine are uncontrolled. Turbine engine exhausts are vented to the atmosphere through 55 foot stacks.

#### 2.2 Regulatory Requirements

PEF conducted emissions tests for the following pollutants while operating at base load. Emission testing was conducted to determine the compliance status of the following:

· Opacity in percent

Table 1 summarizes the applicable emissions limits for CTP-1 and CTP-3.

Table 1: Summary of Emissions Limits
Progress Energy Florida, Inc.
Higgins Power Plant
CTP-1 and CTP-3

Pollutant	Control Technology	Emission Limit
Visual Emission	Good Combustion	≤20%

<sup>4</sup> While firing new No. 2 Fuel Oil or natural gas

PEF Higgins Power Plant VE Compliance Test May 2007 C.E.M. Solutions, Inc. Report: 20-2907-0103-001 Last Updated: June 11, 2007

## 3.0 Test Program/Operating Conditions

Visible emissions tests were completed on CTP-1 (EU No. -004) and CTP-3 (EU No. -006) at the Higgins Power Plant to determine the compliance status of these combustion turbines while firing No. 2 fuel oil. This testing was performed while each unit was burning No. 2 fuel oil at peak load and completed on May 29, 2007.

The turbine operating data was provided by PEF. The heat input during the test was determined by the fuel oil totalizer readings, time of operation, and fuel oil analysis. Copies of the operating data are included in Appendix A of this report.

During testing at peak load while firing on oil, CTP-1 operated at an average of 91% (406 mmBTU/hr) of the maximum heat input curve (444 mmBtu/hr at a combustor inlet temperature of 80°F).

During testing at peak load, CTP-3 operated at an average of 91% (460 mmBTU/hr) of the maximum heat input curve (508 mmBtu/hr at combustor inlet temp of 80°F).

The heat input curves and heat input calculations can be viewed in Appendix A.

Table 2: Summary of Heat Inputs
Progress Energy Florida, Inc.
Higgins Power Plant
CTP-1 and CTP-3

Únit.	Heat Input (MMBtu/hr)	Inlet Temp. °F	Maximum H.I. at Temp.	90 to 100% Target Range For H.I.	Percent of Maximum H.I.
CTP-1 oil	406.0	80	444	400-444	91%
CTP-3 oil	460.0	80	508	457-508	91%

#### 4.0 Test Methods

All testing was performed in accordance with methods approved by the USEPA and FDEP. The following discusses the methods, as well as quality assurance and sample handling procedures.

#### 4.1 Determination of Opacity

USEPA Method 9 was utilized to determine opacity emissions.

Opacity observations were performed by a FDEP certified visual emissions reader. Readings were taken at 15 second intervals and reduced into six minute averages as required by the applicable EPA standard. One-thirty minute opacity run was performed as required in permit condition B.14 (a) 2 while the unit was operating at maximum capacity.

#### 4.2 Fuel Analysis

ASTM test methods D-240 and D-1552 were conducted to determine the heating value and sulfur content of the fuel oil, respectively, used during the test program as required in permit condition B.12.

C.E.M. Solutions, Inc.

Report: 20-2907-0103-001 Last Updated: June 11, 2007

#### 5.0 Test Results

The test program results are presented below. Summaries of the compliance test results for opacity and sulfur dioxide are listed below. Supporting VE field data and fuel analysis reports are presented in Appendix B and C, respectively.

#### 5.1 Opacity

#### 5.1.1 Combustion Turbine Peaking Unit CTP-1 (EU No. -004)

The highest opacity emissions observed in any six-minute average during the thirty minute test run for Unit CTP-1 while firing on oil was 5.0%, passing the 20% emission limitation.

#### 5.1.2 Combustion Turbine Peaking Unit CTP-3 (EU No. -006)

The highest opacity emissions observed in any six-minute average during the thirty minute test run for Unit CTP-3 while firing on oil was 6.0%, passing the 20% emission limitation.

Table 3: Summary of Results
Progress Energy Florida, Inc.
Higgins Power Plant
CTP-1 and CTP-3

Unit Number	Highest 6 Minute Opacity Average
P-1 Oil	5.0%
P-3 Oil	6.0%

C.E.M. Solutions, Inc.

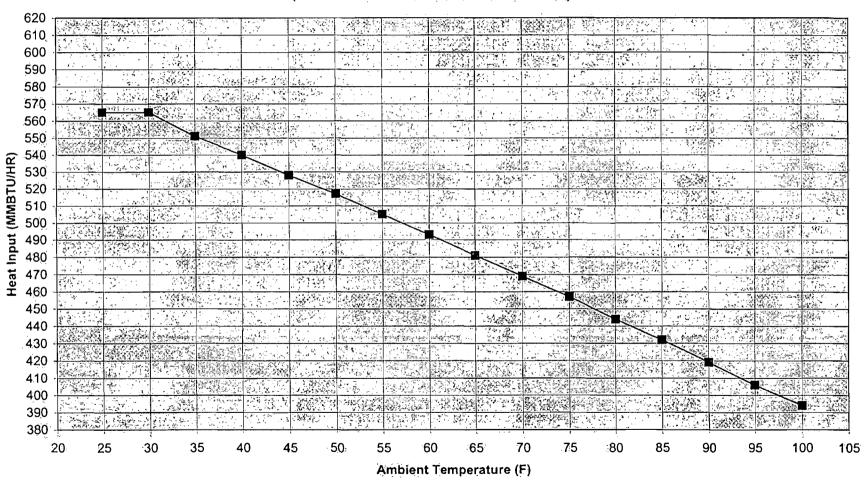
Report: 20-2907-0103-001

Last Updated: June 11, 2007

Appendix A: Heat Input Curve and Calculations

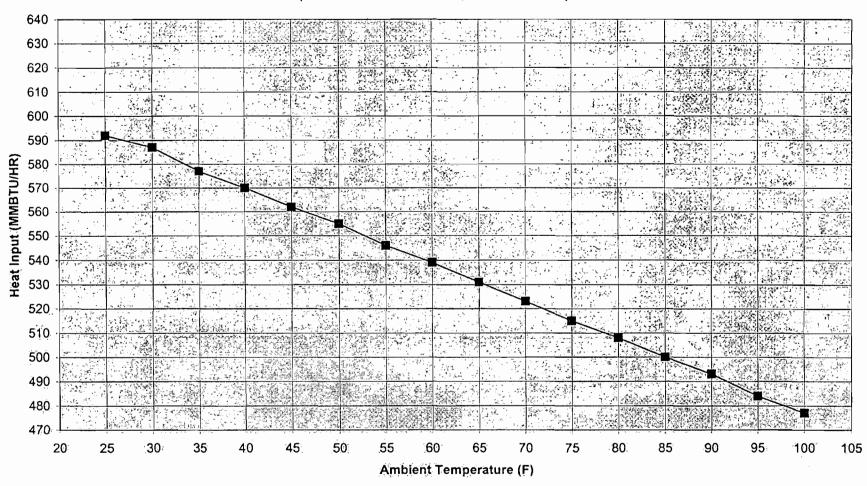
#### **Higgins P1 Combustion Turbine**

Fuel Heat Input vs. Ambient Temperature (Based on December 17, 2003 VE Test)



## **Higgins P3 Combustion Turbine**

Fuel Heat Input vs. Ambient Temperature (Based on December 2, 2003 VE Test)



1183 E. Overdrive Circle • Hernando, FL 34442 • Ph. (352) 489-4337 • Fax: (352) 489-4801

www.cem-solutions.com

# **Combustion Turbine Heat Input Calculations**

Company: Progress Energy Florida

Facility: Higgins Power Plant

Unit: CTP-1

Emissions Unit (EU): EU-004

#### **Facility Fuel Meter Data**

Initial Meter Reading (gallons/Time):	1089944/1112		
Final Meter Reading (gallons/Time):	1094687/1256		
Total gallons burned (Final gallons - In	itial gallons):	4743 gallons	
Period of Time Fuel Consumed, min. (in	nitial-final):	96 minutes	
Gallons burned per minute, gpm (gallor	ns burned/time	fuel consumed):	49.4 gpm
Gallons burned per hour, gph (gpm * 60			

#### **Fuel Analysis Data**

Date Sample Collected: 1/5/2007

Net Heat of Combustion (HHV) Btu/Gal: 137,154

Heat Input, MMBtu/Hra:

406.0 MMBtu/Hr

<sup>&</sup>quot; Heat Input = (gph \* Fuel Heating Value, Btu/Gal)/1000000

1183 E. Overdrive Circle • Hernando, FL 34442 • Ph. (352) 489-4337 • Fax: (352) 489-4801

www.cem-solutions.com

# **Combustion Turbine Heat Input Calculations**

Company: Progress Energy Florida

Facility: Higgins Power Plant

Unit: CTP-3

Emissions Unit (EU): EU -006

#### **Facility Fuel Meter Data**

Initial Meter Reading (gallons/Time):	2501375/1051		
Final Meter Reading (gallons/Time):	2505739/1213		
Total gallons burned (Final gallons - In	itial gallons):	4364 gallons	
Period of Time Fuel Consumed, min. (in	nitial-final):	78 minutes	
Gallons burned per minute, gpm (gallor	ns burned/time f	uel consumed):	55.9 gpm
Gallons burned per hour, gph (gpm * 60			

#### **Fuel Analysis Data**

Date Sample Collected: 1/5/2007

Net Heat of Combustion (HHV)Btu/Gal: 137,154

Heat Input, MMBtu/Hr<sup>a</sup>: 460.0 MMBtu/Hr

<sup>\*</sup> Heat input = (gph.\* Fuel Heating Value, Btu/Gal)/1000000

CAS HAV - 1041 19 HHV - 5160468
SULFUR - 4592
APE - 349
PI Brodie-1084647
P3 Brodie-2497636



FUEL INVENTORY WORKSHEET

HIGGINS G.T.

PLANT

# 2 DIESEL

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AMBIENT TEMP: 00	18 = 0.3 24 = 0.4	.48, ≒ .1 .54   ⊜ೆ	î li	
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P1 UNIT ON LINE @ 1112	OFF @ 125L			
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Appendix B: Method 9 Support Data

VE Field Documentation VE Observers Certificate

#### RECORD OF VISUAL DETERMINATION OF OPACITY

SOURCE/PROCESS INFORMATION					BSE		-	CORD					
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# VISIBLE EMISSIONS EVALUATOR

This is to certify that

# Brian Kimball

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator.

Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

347937

Tampa, Florida

February 14, 2007

Certificate Number

Location

Date of Issue

President

Director of Training





# Visible Emissions Evaluation

This certifies that...

# Shannon Stewart

...successfully completed a course in the methods of measurement of visible emissions from sources as specified by Federal Reference Methods 9 and 22 conducted by Eastern Technical Associates of Raleigh, North Carolina.

Tampa, Florida	_	February 13, 2007
Course Location	<del>7</del>	Date
Thank	Michael W. Junsford	Michael Worland
President	Director of Training	Instructor





# VISIBLE EMISSIONS EVALUATOR

This is to certify that

# Shannon Stewart

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator.

Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

347940

Tampa, Florida

February 14, 2007

Certificate Number

Location

Date of Issue

President

Director of Training

Appendix C: Fuel Analysis Report

# **Laboratory Services**

5012 Causeway Blvd \* Tampa Fl. 33619 \* Ph (813)630-7378 \* Fax (813)630-7360 \* DOH #E54272

Report For: Jody Godsey-Baur, Progress Energy Florida

100 Central Avenue - MAC BT11

St. Petersburg, FL 33701

Report Date: 1/22/2007

Laboratory ID: AA86224

Location Code:

PEI-#2-HIGGINS

jody.godsey-baur@pgnmail.com

Route To:

Progress Energy - Higgins, Progress Energy - Admin

#### Sample Information

Description: #2 Oil, Higgins GT, Progress Energy Inc.

Project Account Code: 01

Sample Collection Method: Sampled by Customer

UNIT NUMBER: Fuel Tank # 1

Sampled By: ROBERT SCALLIONS

Date and Time Collected: 1/5/2007 9:16:00 AM

Date of Sample Receipt:

1/5/2007

SAMPLE TYPE: GAS TURBINE

La	por	atory	/ Kes	uits

PARAMETER	Result	Units	MDL	Qual Code	Test Method	Analyst	Analysis Date & Time	Lower Limit	Upper Limit	Violatio Chéck
API Gravity @ 60 Deg. F	34.9	Degrees API	0.1		ASTM D5002	PJ	01/08/07 11:35			
Carbon, Hydrogen, and Nitrogen in Oil		- · · · · · · · · · · · · · · · · · · ·			1 "	· · ·			<del></del>	
Carbán.	86.9	<b>4</b> 5			ASTM 5291	MM.	01/15/07.11:00			
Hydrogen	12:2	:%			ASTM 5291	ММ	01/15/07/11:00			
Nitragen	< 0.2	%	0.2	U	ASTM 5291	ММ	01/15/07 11:00			
Density @ 15 C (59 F)	0.8499	kg/L	0.0001		ASTM Table3	MM	01/17/07 11:33			
Gross Heat of Combustion, Oils, (HHV)	5760468	BTU/Barrel	1		Calculation	PJ	01/15/07 09:04			
Gross Heat of Combustion, Oils, (HHV)	137154	BŤÛ/Gal.	Ť		Calculation	PJ	01/15/07 09:04	137000		
Gross Heat of Combustion, Oils,:(HHV)	19372	ВТИЛЬ.	1		ASTM D-240	ΡJ	01/11/07 11:00			
Net:Heat of Combustion, Oils, (LHV)	5429508	BTU/Barrel	1		Calculation	ММ	01/17/07 11:32			
Net Heat of Combustion, Oils. (LHV)	ĭ29274	BTU/Gal.	Ì		Calculation	мм	01/17/07 11:32			
Net Heat of Combustion, Oils, (LHV)	18259	BTU/Lb.	्रम्		ASTM D-240	MM	01/17/07 11:32			
Pounds / Gallon @ 60 Deg. F	7.080	Lbs/Gal.	0.001		ASTM D 1250-80		01/08/07 12:08		9.5	
Relative Density 60/60 Deg. F	0.8504		0.0001		ASTM D-1298	.PJ	01/08/07-12:08			
Sulfur in Petroleum Products	0.45		0.01		ASTM D-1552	EMD	01/08/07 11:55		0.5	

#### Comments

Data Qualifier Codes Explanation:

U - Indicates that the compound was analyzed for but not detected.

Should there be any questions regarding this report, please contact:

Robert Dorey,

Manager, Laboratory Services

(813) 630-7378

Analyses reported by this laboratory are based upon material supplied by the client. Laboratory Services does not imply that the contents of the sample received by this laboratory; same as all such material in the environment from which the sample was taken. Our results relate only to the sample as lested. Tampa Electric assumes no responsibly makes no warranty or representation, express or implied, as to the suitability of the sample material for any specific use.

Page 1 of 1

Higgins Power Plant

# **Attachment CTP-5**

Combustion Turbine Peaking Units Alternative Methods of Operation

### **Attachment CTP-5**

Alternative Methods of Operation Higgins Power Plant

As noted in Specific Condition B.4.(a) of the Title V Permit No. 1030012-004-AV, each combustion turbine can fire either natural gas or No. 2 fuel oil.

Higgins Power Plant

# **Attachment RDG-1**

Relocatable Diesel Generator(s)
Process Flow Diagram

