

RECEIVED
FEB 01 2005
BUREAU OF AIR REGULATION

January 31, 2005

Mr. Mike Halpin P.E. Division of Air Resource Management 2600 Blair Stone Road MS 5500 Tallahassee, Florida 32399-2400

Re:

Progress Energy - Permit Application for Air Permit Revisions

Facility ID 1050234

Dear Mr. Halpin:

As discussed with Scott Osbourn last week, attached is an application to increase the heat input for Hines Power Blocks 2 and 3. Attached are four copies of the application.

We would very much appreciate expediting the processing of this application to allow the plant flexibility in the operation of these base load units.

If you have any questions, please contact me at (727) 820-5295.

Sincerely,

Dave Meyer

Senior Environmental Specialist

Que mine

Attachment:

xc: Roger Zirkle

11. Jason status, SWD



# Department of RECEIVED Environmental Protection FEB 0.1 2005

Division of Air Resource Managementureau OF AIR REGULATION
APPLICATION FOR AIR PERMIT - LONG: FORM

#### I. APPLICATION INFORMATION

Air Construction Permit - 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
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

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 & Revised/Renewal 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, p	lease see form instructions.	
Identification of Facility		
1. Facility Owner/Company Name: Progress	Energy Florida	
2. Site Name: Hines Energy Complex		
3. Facility Identification Number: 1050234		
4. Facility Location:		
Street Address or Other Locator: 7700 C	ounty Road 555	
City: Bartow County:	Polk Zip Code: 33830	
5. Relocatable Facility?	6. Existing Title V Permitted Facility?	
☐ Yes	⊠ Yes □ No	
Application Contact		
1. Application Contact Name: Dave Meyer, P.	E. , Senior Environmental Specialist	
2. Application Contact Mailing Address		
Organization/Firm: Progress Energy Florid		
Street Address: 100 Central Avenue, C		
City: St. Petersburg State: FL Zip Code: 33701		
3. Application Contact Telephone Numbers		
Telephone: (727) 820-5295 ext.	Fax: (727) 820-5229	
4. Application Contact Email Address: Dave	Meyer@pgnmail.com	
Application Processing Information (DEP Use)		
1. Date of Receipt of Application:	2-1-05	
2. Project Number(s):	1050234-011-AC 1050234-012-AU	
3. PSD Number (if applicable):	105 0734-013-AL	
4. Siting Number (if applicable):	-	

#### **Purpose of Application**

This application for air permit is submitted to obtain: (Check one)
Air Construction Permit  Air construction permit.
Air Operation Permit  Initial Title V air operation permit.  Title V air operation permit revision.  Title V air operation permit renewal.  Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.  Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.
Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)  ☑ Air construction permit and Title V permit revision, incorporating the proposed project.  ☐ Air construction permit and Title V permit removed 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 permit application is for the purpose of increasing the heat input limits for Power Blocks 2 and 3 by approximately 6 percent on oil- and gas-firing. The applicant is not requesting an increase in any of the current permit allowables for any existing emission limit.
The current TV Operating Permit (PB 2) is DEP file No. 1050234-008-AV; the current Construction Permit (PB 3) is 1050234-006-AC, PSD-FL-330.

**Scope of Application** 

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
014	CT-2A; Power Block 2		
015	CT-2B; Power Block 2		
016	CT-3A; Power Block 3		
017	CT-3B; Power Block 3		
****			
-			
<del></del>			

Application Processing ree	
Check one: Attached - Amount:	Not Applicable

# Owner/Authorized Representative Statement Complete if applying for an air construction permit or an initial FESOP.

1.	Owner/Authorized Represen	tative Name :	
2.	Owner/Authorized Represent Organization/Firm:	tative Mailing Address	
	Street Address:		
	City:	State:	Zip Code:
3.	Owner/Authorized Represen	tative Telephone Numbers	•••
	Telephone: ( ) -	ext. Fax:	( ) -
4.	Owner/Authorized Represen	tative Email Address:	
5.	Owner/Authorized Represen	tative Statement:	
	this air permit application. It reasonable inquiry, that the scomplete and that, to the best application are based upon a pollutant emissions units and will be operated and maintain of air pollutant emissions for Department of Environmental identified in this application granted by the department, of	I hereby certify, based on is statements made in this apply to fine my knowledge, any est reasonable techniques for a dir pollution control equipmed so as to comply with a fine of the Statutes of the Statut	intative of the facility addressed in information and belief formed after plication are true, accurate and imates of emissions reported in this calculating emissions. The air imment described in this application all applicable standards for control ate of Florida and rules of the inthereof and all other requirements ject. I understand that a permit, if out authorization from the upon sale or legal transfer of the
	Signature		Date

#### 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: Roger Zirkle, Plant Manager
2.	<ul> <li>Application Responsible Official Qualification (Check one or more of the following options, as applicable):</li> <li>✓ 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.</li> <li>☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.</li> <li>☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.</li> </ul>
3.	The designated representative at an Acid Rain source.  Application Responsible Official Mailing Address
٥.	Organization/Firm: Progress Energy Florida  Street Address: P.O. Box 14042, HE44  City: St. Petersburg State: FL Zip Code: 33733-4042
4.	Application Responsible Official Telephone Numbers
	Telephone: (863) 519-6103 ext. Fax: (863) 519-6110
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.  Signature  Date

DEP Form No. 6 Effective: 06/16/

Pr	ofessional Engineer Certification
1.	Professional Engineer Name: Scott Osbourn
	Registration Number: 57557
2.	Professional Engineer Mailing Address
	Organization/Firm: Golder Associates Inc.**
	Street Address: 5100 W. Lemon St, Suite 114
	City: Tampa State: FL Zip Code: 33609
3.	Professional Engineer Telephone Numbers
	Telephone: (813) 287-1717 ext. 211 Fax: (813) 287-1716
4.	Professional Engineer Email Address: SOsbourn@golder.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions
	unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air
	pollutant emissions found in the Florida Statutes and rules of the Department of Environmental
	Protection; and
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application
	are true, accurate, and complete and are either based upon reasonable techniques available for
	calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an
	emissions unit addressed in this application, based solely upon the materials, information and
	calculations submitted with this application.
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here , 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 $\square$ , 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 \infty, 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 $\square$ ,
	if so), I further certify that, with the exception of any changes detailed as part of this application,
	each such emissions unit has been constructed or modified in substantial accordance with the
	information given in the corresponding application for air construction permit and with all
	provisions contained in such permit.
	Signature Dafe
	(seal) with H. O.S. The
	TIFIC
	* Attach any ekception to certification of tement.
	** Board of Professional Engineers Certificate of Authorization #00001670

0437512\4\4.3\PEF\_KFK\_Form1\_EU2.doc 1/31/2005

#### A. GENERAL FACILITY INFORMATION

#### **Facility Location and Type**

1. Facility UTM Coordinates		2.	2. Facility Latitude/Longitude	
			Latitude (DD/MM/SS) 27/47/19	
Nor	th (km) 3073.9		Longitude (DD/MM/SS) <b>81/52/10</b>	
3. Governmental	4. Facility Statu	s 5.	Facility Major	6. Facility SIC(s):
Facility Code:	Code:		Group SIC Code:	4911
0	С		49	
7. Facility Comment: Power Blocks (PBs)1 and 2 are nominal 500 MW combined cycle units, each consisting of 2 CTs, 2 HRSG's, and 1 steam turbine. The CTs fire natural gas with distillate oil as a backup. The HRSGs are unfired. Operation of PB 1 began in 1999 and PB 2 in November 2003. PB 3 is currently under construction. This application is for a revision to the heat input limits to PBs 2 and 3.				
Facility Contact				
Facility Contact N     Roger Zirkle, Plan				·
2. Facility Contact N	Mailing Address			
Organization/Firm	n: Hines Energy Co	mplex		
Channel Antonia	s: 7700 County Road	d 555		
Street Address	s. 7700 County Mou			
ſ	: Bartow	State	FL Zip	Code: <b>33830</b>
City 3. Facility Contact 7	v: Bartow Telephone Numbers	State		***************************************
City	v: Bartow Telephone Numbers	State	FL Zip Fax: (863) 519-61	***************************************
City 3. Facility Contact 7	7: Bartow Telephone Numbers ) 519-6103	State:		***************************************
City 3. Facility Contact Telephone: (863 4. Facility Contact F	r: Bartow Telephone Numbers ) 519-6103 Email Address:	State:		***************************************
City 3. Facility Contact T Telephone: (863)	r: Bartow Telephone Numbers 5 519-6103 Email Address:  ponsible Official ication responsible	State:	Fax: (863) 519-61	10
3. Facility Contact 7 Telephone: (863 4. Facility Contact F  Facility Primary Res Complete if an "apple	r: Bartow Felephone Numbers 519-6103 Fmail Address:  ponsible Official ication responsible ponsible official."	State:	Fax: (863) 519-61	10
City 3. Facility Contact T Telephone: (863) 4. Facility Contact F  Facility Primary Res Complete if an "appl facility "primary res  1. Facility Primary Res	relephone Numbers 519-6103 Email Address:  ponsible Official ication responsible ponsible official." esponsible Official	State: ext.  cofficial" Name:	Fax: (863) 519-61	10
City 3. Facility Contact 7 Telephone: (863 4. Facility Primary Res Complete if an "apple facility "primary res  1. Facility Primary Res 2. Facility Primary Res	r: Bartow Telephone Numbers ) 519-6103 Email Address:  ponsible Official ication responsible ponsible official." esponsible Official	State: ext.  cofficial" Name:	Fax: (863) 519-61	10
3. Facility Contact Telephone: (863) 4. Facility Contact Facility Primary Res Complete if an "applifacility "primary responsible Primary Responsib	relephone Numbers 519-6103 Email Address:  ponsible Official ication responsible ponsible official." esponsible Official esponsible Official	State: ext.  cofficial" Name:	Fax: (863) 519-61 is identified in Sec	10
3. Facility Contact Telephone: (863) 4. Facility Primary Res Complete if an "applifacility "primary res  1. Facility Primary Res Complete if an "applifacility "primary Res Complete if an "applifaci	relephone Numbers 519-6103 Email Address:  ponsible Official ication responsible ponsible official." esponsible Official esponsible Official	State:  cofficial*  Name:  Mailing A	Fax: (863) 519-61 is identified in Sec	tion I. that is not the
3. Facility Contact 7 Telephone: (863 4. Facility Primary Res Complete if an "appl facility "primary res  1. Facility Primary Res Organization/Firm Street Address: City	relephone Numbers 519-6103  Email Address:  ponsible Official ication responsible ponsible Official." esponsible Official  esponsible Official  cesponsible Official	State:  cofficial*  Name:  Mailing A	Fax: (863) 519-61 is identified in Sec	tion I. that is not the

#### **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
2. 🗆	Synthetic Non-Title V Source
3. 🛛	Title V Source
4. 🛛	Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)
5.	Synthetic Minor Source of Air Pollutants, Other than HAPs
6. 🗆	Major Source of Hazardous Air Pollutants (HAPs)
7. 🗆	Synthetic Minor Source of HAPs
8. 🛛	One or More Emissions Units Subject to NSPS (40 CFR Part 60)
9. 🗆	One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)
10. 🔲	One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)
11.	Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))
	cility Regulatory Classifications Comment: plicable NSPS is 40 CFR Part 60; Subpart GG.

#### List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter - Total (PM)	A	
Sulfur Dioxide (SO₂)	A	
Nitrogen Oxides (NO <sub>x</sub> )	A	
Carbon Monoxide (CO)	A	
Volatile Organic Compounds (VOC)	A	
Sulfuric Acid Mist (SAM)	В	
:		
		<u>.</u>

#### **B. EMISSIONS CAPS**

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant	2. Facility	3. Emissions	4. Hourly	5. Annual	6. Basis for
Subject to	Wide	Unit ID No.s	Cap	Cap	Emissions
Emissions	Cap	Under Cap	(lb/hr)	(ton/yr)	Cap
Cap	[Y or N]?	(if not all	(10,111)	((012 )1)	Cup
Сар	(all units)				
	(all ulits)	units)		ļ	
			<u> </u>		-
				<u> </u>	
					·
	<del> </del>	<del></del>		<u> </u>	-
	<u> </u>				
					-
	<del> </del>		-		
7 Facility-W	ide or Multi-I In	it Emissions Cap C	'omment'	<del></del>	<u> </u>
. rueinty w	ido or main on	iii Eimoorono cup c			

#### 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
ļ	previous five years and would not be altered as a result of the revision being sought)
	☐ Attached, Document ID: ☐ 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:  Previously Submitted, Date:
<u> </u>	
3.	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:
Ac	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 or Modification:  Attached, Document ID:
3.	Rule Applicability Analysis:  Attached, Document ID:
4.	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)
5.	Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.):
	☐ Attached, Document ID: ⊠ Not Applicable
6.	Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.):  ☐ Attached, Document ID:  ☐ Not Applicable
7.	Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.):  ☐ Attached, Document ID:   ☐ Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.):  ☐ Attached, Document ID: ☐ Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.):  ☐ Attached, Document ID: ☐ Not Applicable
10	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):  Attached, Document ID:  Not Applicable

DEP Form No. 62-210.900(1) – Form 0437512\4\4.3\PEF\_KFK\_Form1\_EU2.doc Effective: 06/16/03 11 1/31/2005

#### **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)
Ad	Iditional Requirements for Title V Air Operation Permit Applications
1.	List of Insignificant Activities (Required for initial/renewal applications only):
	☐ Attached, Document ID: ☐ 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):  Attached, Document ID:
	Not Applicable (revision application with no change in applicable requirements)
3.	Compliance Report and Plan (Required for all initial/revision/renewal applications):  Attached, Document ID:  Note: A compliance plan must be submitted for each emissions unit that is not in
	compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4.	List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
	Attached, Document ID:
	Equipment/Activities On site but Not Required to be Individually Listed
<u> </u>	Not Applicable  Varification of Pill Market Applied 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
5.	Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only):
	☐ Attached, Document ID: ⊠ Not Applicable
6.	Requested Changes to Current Title V Air Operation Permit:  Attached, Document ID: PEF-FI-PB2/3
<u>Ad</u>	ditional Requirements Comment
and inc The Co	is permit application is for the purpose of increasing the heat input limits for Power Blocks 2 d 3 by approximately 6 percent on oil- and gas-firing. The applicant is not requesting an crease in any of the current permit allowables for any existing emission limit.  Be current TV Operating Permit (PB 2) is DEP file No. 1050234-008-AV; the current enstruction Permit (PB 3) is 1050234-006-AC, PSD-FL-330.  Be requested heat input curve for these units is attached (PEF-F1-PB2/3)
	<u> </u>

#### EMISSIONS UNIT INFORMATION Section [1] of [4] CT-1 – Power Block 2

#### 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.

Section [1] of CT-1 – Power Block 2

[4]

#### A. GENERAL EMISSIONS UNIT INFORMATION

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

1.		V a	ir operation pern				one, if applying for if applying for an		
	emissions	uni	t.				Jnit Information S Jnit Information S		
	· <del></del>		missions unit.		EIIIISSIO		Juit information S		on is an
<u>En</u>	nissions Unit	Des	cription and Sta	tus					
1.	Type of Emis	sio	ıs Unit Addresse	d in	this Sectio	n: (	(Check one)		
							ses, as a single em		
	-	-	oduction unit, or least one definab		•	-	oduces one or mor stack or vent).	e an	r pollutants and
					-		,	iissi	ons unit, a group of
	process o	r pr		d ac	tivities wh	ich	has at least one de		able emission point
							ses, as a single em vhich produce fug		
2.	Description of CT-1; Power		nissions Unit Ad k 2	dres	ssed in this	Sec	etion:		
3.	Emissions U	nit I	dentification Nur	nbe	r: <b>014</b>				
4.	Emissions	5.	Commence	6.	Initial	7.		8.	
	Unit Status Code:		Construction Date:		Startup Date:		Major Group SIC Code:		⊠ Yes □ No
	C C		Date.		Duto.		49		
9.	Package Unit					<u> </u>			
10			emens Westingh			Mo	del Number: 501 I	FD	
			plate Rating: 170	) M	<u> </u>				
11.	Emissions Un Siemens Wes back-up.			mbı	ustion turbi	ne f	iring natural gas w	/ith	distillate oil

Section [1] of [4] CT-1 – Power Block 2

#### **Emissions Unit Control Equipment**

1.	Control Equipment/Method(s) Description:  Dry Low NO <sub>x</sub> combustion - natural gas firing.
	Selective Catalytic Reduction (SCR) – natural gas firing/distillate oil firing.
	Water Injection – distillate oil firing.
2.	Control Device or Method Code(s): 025, 065, 028

Section [1] of [4] CT-1 – Power Block 2

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

(Optional for unregulated emissions units.)

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

1.	Maximum Process or Throughpu	it Rate:	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: 2,04	5 million Btu/hr	
4.	Maximum Incineration Rate:	pounds/hr	
		tons/day	
5.	Requested Maximum Operating	Schedule:	
		hours/day	days/week
		weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule Co Heat input is higher heating value temperature; MW nominal rating.	e (HHV) with natural gas; he	at input at 59°F turbine inlet

Section [1] of [4] CT-1 – Power Block 2

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

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

Identification of Point on Flow Diagram: Stack Exhaustics		2. Emission Point 7	Type Code:
3. Descriptions of Emission Exhausts through a single		g this Emissions Unit	for VE Tracking:
4. ID Numbers or Descriptio	ns of Emission Ur	nits with this Emission	n Point in Common:
<ol><li>Discharge Type Code:</li><li>V</li></ol>	<ol> <li>Stack Height</li> <li>125 feet</li> </ol>	<i>:</i>	7. Exit Diameter: 19 feet
8. Exit Temperature: 190°F	9. Actual Volumetric Flow Rate: 1,009,487 acfm		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): North (km)	414.4	14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Temperature and flow for i		turbine inlet.	

Section [1] of [4]

CT-1 - Power Block 2

**Natural Gas** 

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type):

i					
2.	Source Classification Cod 2-01-002-01	le (SCC):	3. SCC Units Million Cu		eet
4.	Maximum Hourly Rate: 2.082	5. Maximum . 17,392	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit: 1,030
10	Segment Comment:  Based on 1,030 BTU/CF (H temperatures.	HV); maximum h	ourly at 20°F; ar	nual	at 59°F; turbine inlet
Se	gment Description and Ra	ite: Segment 2	of <u>2</u>		
1.	Segment Description (Pro- Distillate Fuel Oil	cess/Fuel Type):			
2.	Source Classification Cod 2-01-001-01	e (SCC):	3. SCC Units Thousand		ns Used
4.	Maximum Hourly Rate: 16.04	5. Maximum / 19,703	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur: 0.05	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit: 141.2
10.	Segment Comment: BTU based on HHV of 141. turbine inlet temperatures. Block 2. Fuel oil consumptin a single turbine.	Aggregate fuel u	sage of 19,703,6	000 ga	rly at 20°F; annual at 59°F; allons per year for Power allowable fuel may be used
	Block 2. Fuel oil consump	Aggregate fuel u tion is not limited	sage of 19,703, per turbine, an	000 g; d the	allons per year for Power allowable fuel may be us

Section [1] of [4] CT-1 – Power Block 2

#### E. EMISSIONS UNIT POLLUTANTS

#### List of Pollutants Emitted by Emissions Unit

1.	Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	Pollutant     Regulatory Code
	PM			EL
	SO <sub>2</sub>			EL
	NO <sub>x</sub>	026	065	EL
	СО			EL
	voc			EL
	SAM			EL
		· · · · · · · · · · · · · · · · · · ·		-
<u> </u>				
<del> </del>				
ш		l	l	ı

Section [1] of [4] CT-1 – Power Block 2

#### 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: Not Applicable

Section [1] of [4] CT-1 – Power Block 2

#### Additional Requirements for Air Construction Permit Applications

1.	Control Technology Review and Analysis (Rules 62-212.400(6) 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(5)(h)6., 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
Ac	Iditional Requirements for Title V Air Operation Permit Applications
1.	Identification of Applicable Requirements
	☐ Attached, Document ID: ☐ Not Applicable
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:
	Not Applicable     ■

# Section [1] CT-1 – Power Block 2 **Additional Requirements Comment**

**EMISSIONS UNIT INFORMATION** 

of

[4]

#### EMISSIONS UNIT INFORMATION Section [2] of [4] CT-2 – Power Block 2

#### 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.

Section [2] of CT-2 – Power Block 2

#### of [4]

#### A. GENERAL EMISSIONS UNIT INFORMATION

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or

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

	renewal Title permit or FES		nit. Skip this i	tem if applying for an	air construction
	emissions  The emis	s unit.		ns Unit Information S	
<u>En</u>	nissions Unit	Description and Sta	<u>ıtus</u>		
1.	Type of Emis	ssions Unit Addresse	d in this Section	on: (Check one)	
	process o		activity, which	dresses, as a single em a produces one or mor int (stack or vent).	
	process o		d activities wh	ich has at least one de	nissions unit, a group of efinable emission point
				dresses, as a single em es which produce fug	*
2.	Description of CT-2; Power	of Emissions Unit Ad Block 2	ldressed in this	Section:	
3.	Emissions U	nit Identification Nur	nber: <b>015</b>		
4.	Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? ☑ Yes ☐ No
9.	Package Unit			N	
10		r: Siemens Westinghe Iameplate Rating: 170		Model Number: 501 I	FD .
	. Emissions U	nit Comment:		ne firing natural gas w	vith distillate oil
			· · · · · · · · · · · · · · · · · · ·		

Section [2] of [4] CT-2 – Power Block 2

#### **Emissions Unit Control Equipment**

1.	Control Equipment/Method(s) Description:  Dry Low NO <sub>x</sub> combustion - natural gas firing.
	Selective Catalytic Reduction (SCR) – natural gas firing/distillate oil firing.
	Water Injection – distillate oil firing.
2.	Control Device or Method Code(s): 025, 065, 028

Section [2] of [4] CT-2 – Power Block 2

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

(Optional for unregulated emissions units.)

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

	Maximum Process or Throughpu	t Rate:	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: 2,045	million Btu/hr	
4.	Maximum Incineration Rate:	pounds/hr	<del></del>
		tons/day	
5.	Requested Maximum Operating S	Schedule:	
	-	hours/day	days/week
İ		weeks/year	8,760 hours/year
	Heat input is higher heating value	(HHV) with natural gas; heat	t input at 59°F turbine inlet
	temperature; MW nominal rating.		

Section [2] of [4] CT-2 – Power Block 2

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

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

Identification of Point on Flow Diagram: Stack Exh		2. Emission Point	Гуре Code:	
Descriptions of Emission Exhausts through a single      ID Numbers or Description	stack.			
5. Discharge Type Code: <b>v</b>	<ul><li>5. Discharge Type Code: 6. Stack Height</li><li>V 125 feet</li></ul>		7. Exit Diameter: 19 feet	
8. Exit Temperature: 9. Actual Volum 190°F 1,009,487 acf		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): 414.4 North (km): 3073.9		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15. Emission Point Comment: Temperature and flow for natural gas at 59°F turbine inlet.				

Section [2] of CT-2 – Power Block 2 [4]

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

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

1.	Segment Description (Pro Natural Gas	ocess/Fuel Type):		
2.	2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet	
4.	Maximum Hourly Rate: 2.082	5. Maximum 17,392	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 1,030
10	Segment Comment:  Based on 1,030 BTU/CF (H temperatures.	IHV); maximum h	ourly at 20°F; an	nual at 59°F; turbine inlet
S.	ment Description and De	star Comment 2	of 0	

Segment Description and Rate: Segment 2 of 2					
1.	Segment Description (Pro Distillate Fuel Oil	ocess/Fuel Type):			
2.	2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand Gallons Used		
4.	Maximum Hourly Rate: 16.04	5. Maximum 19,703	Annual Rate:	6. Estimated Annual Activity Factor:	
7.	Maximum % Sulfur: 0.05	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 141.2	
10	turbine inlet temperatures	. Aggregate fuel	usage of 19,703,	n hourly at 20°F; annual at 59°F; ,000 gallons per year for Power d the allowable fuel may be used	

Section [2] of [4] CT-2 – Power Block 2

#### E. EMISSIONS UNIT POLLUTANTS

#### List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
SO <sub>2</sub>			EL
NO <sub>x</sub>	026	065	EL
со			EL
VOC			EL
SAM			EL
**************************************			

Section [2] of [4] CT-2 – Power Block 2

#### 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.	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:   Not Applicable

Section [2] of [4] CT-2 – Power Block 2

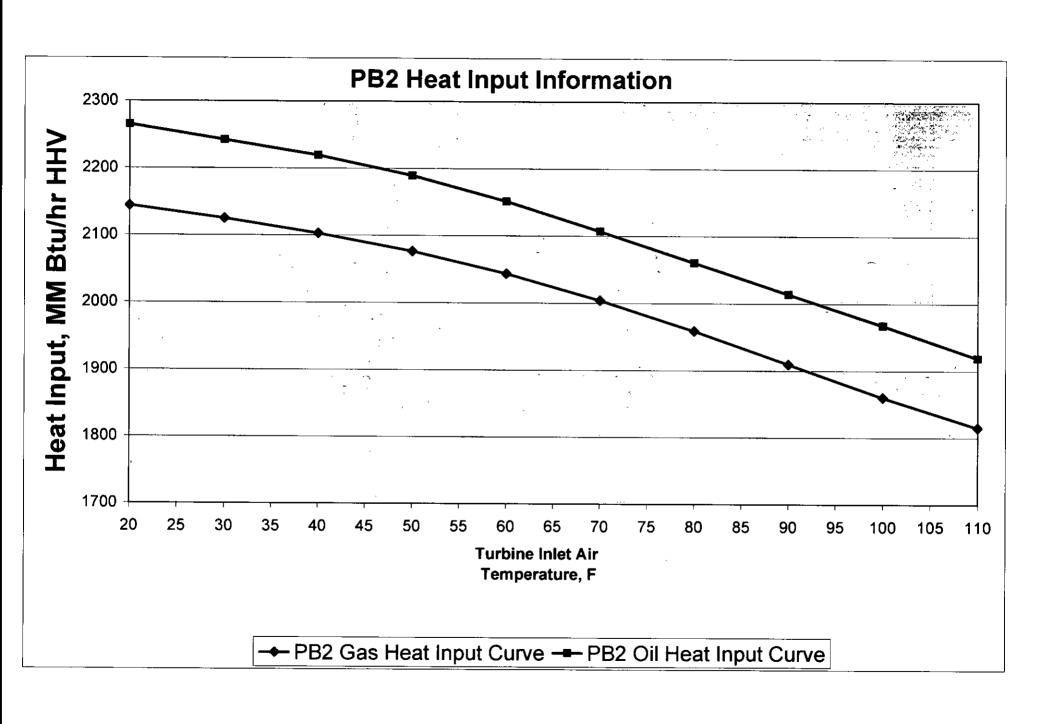
#### **Additional Requirements for Air Construction Permit Applications**

_					
1.	1. Control Technology Review and Analysis (Rules 62-212.400(6) 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(5)(h)6., F.A.C., and				
۷.	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				
<u>A</u> (	Iditional Requirements for Title V Air Operation Permit Applications				
1.	Identification of Applicable Requirements				
	☐ Attached, Document ID: ☐ Not Applicable				
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:				
	Not Applicable     ■				

# Section [2] of [4] CT-2 – Power Block 2 Additional Requirements Comment

DEP Form No. 62-210.900(1) – Form Effective: 06/16/03

**EMISSIONS UNIT INFORMATION** 



Section [3] of [4] CT-1 – Power Block 3

#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for 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.

Section [3] of [4] CT-1 – Power Block 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.)								
	<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>								
<u>En</u>	nissions Unit			<u>tus</u>	<u></u>				
1.	Type of Emis	sions Uni	it Addressed	d in thi	s Section	: (	Check one)		
	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).								
	process o	r producti		d activ	ities whic	ch l	as at least one de		ons unit, a group of ble emission point
							es, as a single em hich produce fug		
2.	Description of CT-1; Power		ons Unit Ad	dressed	d in this S	Sect	ion:		
3.	Emissions U	nit Identif	ication Nun	nber: 0	16				
	Emissions Unit Status Code: C	Date	struction		artup ate:	7.	Emissions Unit Major Group SIC Code: 49	8.	Acid Rain Unit? ⊠ Yes □ No
9.	Package Unit		. 10/ 4/			<i>f</i>	1-1 November 504 1		
10					N	VIO	iei Number: 501 i	ט-	
	Manufacturer: Siemens Westinghouse Model Number: 501 FD  O. Generator Nameplate Rating: 170 MW  1. Emissions Unit Comment: Siemens Westinghouse 501 FD combustion turbine firing natural gas with distillate oil back-up.								

Section [3] of [4] CT-1 – Power Block 3

# **Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description: Dry Low NO <sub>x</sub> combustion - natural gas firing.  Selective Catalytic Reduction (SCR) - natural gas firing/distillate oil firing.  Water Injection - distillate oil firing.		
Water Injection distillate oil firing.	1.	
		Selective Catalytic Reduction (SCR) – natural gas firing/distillate oil firing.
2. Control Device or Method Code(s): 025 055 028		Water Injection distillate oil firing.
2. Control Device or Method Code(s): 025, 055, 028		
2. Control Device or Method Code(s): 025, 055, 028		
2. Control Device or Method Code(s): 025, 055, 028		
2. Control Device or Method Code(s): 025, 055, 028		
2. Control Device or Method Code(s): 025, 055, 028		
2. Control Device or Method Code(s): 025, 028		·
2 Control Device or Method Code(s): 025, 055, 028	i	
2. Control Device or Method Code(s): 025, 065, 028		
2 Control Davice or Method Code(s): 025, 065, 028		
2 Control Device or Method Code(s): 025, 065, 028		
2 Control Device or Method Code(s): 025, 065, 028		
2 Control Device or Method Code(s): 025, 065, 028		
2 Control Device or Method Code(s): 025, 065, 028		
	2.	Control Device or Method Code(s): 025, 065, 028

Section [3] of [4] CT-1 – Power Block 3

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

(Optional for unregulated emissions units.)

# **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughp	ut Rate:	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: 2,04	5 million Btu/hr	
4.	Maximum Incineration Rate:	pounds/hr	
		tons/day	
5.	Requested Maximum Operating	Schedule:	
		hours/day	days/week
		weeks/year	<b>8,760</b> hours/year
6.	Operating Capacity/Schedule Content input is higher heating valued temperature; MW nominal rating	ie (HHV) with natural gas; heat	t input at 59°F turbine inlet
6.	Heat input is higher heating valu	ie (HHV) with natural gas; heat	t input at 59°F turbine inlet

Section [3] of [4] CT-1 – Power Block 3

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

# **Emission Point Description and Type**

1.	Identification of Point on I Flow Diagram: Stack Exha		2. Emission Point T	Type Code:			
	3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Exhausts through a single stack.						
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:							
5.	Discharge Type Code: V	<ol><li>Stack Height</li><li>125 feet</li></ol>	::	<ol> <li>Exit Diameter:</li> <li>19 feet</li> </ol>			
8.	Exit Temperature: 190°F	9. Actual Volum 1,009,487 act	metric Flow Rate:	10. Water Vapor: %			
11.	. Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emission Point Height: feet				
13.	Emission Point UTM Coo Zone: 17 East (km): North (km)	414.4	14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)				
15.	Emission Point Comment: Temperature and flow for I		turbine inlet.				
			•				

Section [3] of [4] CT-1 – Power Block 3

# D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1.	Segment Description (Pro Natural Gas	cess/Fuel Type):			
2.	Source Classification Coc 2-01-002-01	le (SCC):	3. SCC Units Million Cul		eet
4.	Maximum Hourly Rate: 2.082	5. Maximum 17,392	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit: 1,030
10	. Segment Comment: Based on 1,030 BTU/CF (F temperatures.	IHV); maximum h	nourly at 20°F; ar	nnual	at 59°F; turbine inlet

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

1.	Segment Description (Pro Distillate Fuel Oil	cess/Fuel Type):		
2.	Source Classification Cod 2-01-001-01	le (SCC):	3. SCC Units Thousand	s: Gallons Used
4.	Maximum Hourly Rate: 16.04	5. Maximum 19,703	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur: 0.05	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 141.2
10	turbine inlet temperatures	. Aggregate fuel i	usage of 19,703,0	m hourly at 20°F; annual at 59°F; 000 gallons per year for Power ad the allowable fuel may be used

Section [3] of [4] CT-1 – Power Block 3

#### E. EMISSIONS UNIT POLLUTANTS

# List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
SO <sub>2</sub>		-	EL
NO <sub>x</sub>	026	065	EL
СО			EL
voc			EL
SAM			EL
· · · · · · · · · · · · · · · · · · ·			

Section [3] of [4] CT-1 – Power Block 3

#### I. EMISSIONS UNIT ADDITIONAL INFORMATION

# Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  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: Not Applicable

Section [3] of [4]

CT-1 - Power Block 3

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

1.	Control Technology Review and Analysis (Rules 62-212.400(6) 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(5)(h)6., 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
A	dditional Requirements for Title V Air Operation Permit Applications
1.	Identification of Applicable Requirements
	☐ Attached, Document ID: ☐ Not Applicable
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:
	Not Applicable     ∴

# Section [3] of [4] CT-1 – Power Block 3 Additional Requirements Comment

**EMISSIONS UNIT INFORMATION** 

#### EMISSIONS UNIT INFORMATION Section [4] of [4] CT-2 – Power Block 3

#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for 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.

Section [4] of CT-2 – Power Block 3

#### of [4]

#### 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  The emis	<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>							
	unregulated emissions unit.								
	Emissions Unit Description and Status								
1.	. Type of Emissions Unit Addressed in this Section: (Check one)								
	☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).								
	process o	r pr		d ac	ctivities wh	ich l	nas at least one de		ons unit, a group of ble emission point
							es, as a single em		· ·
2.	Description of CT-2; Power		nissions Unit Ad k 3	ldre	ssed in this	Sec	tion:		
3.	Emissions U	nit I	dentification Nur	nbe	r: <b>017</b>				
4.	Emissions Unit Status Code:	5.	Commence Construction Date:	6.	Initial Startup Date:	7.	Emissions Unit Major Group SIC Code: 49	8.	Acid Rain Unit?  ☑ Yes ☐ No
9.	Package Unit		emens Westingh	ous	e	Mod	del Number: <b>501 F</b>	D.	
10.			plate Rating: 170						
11.	Emissions Un Slemens Wes back-up.			mbı	ustion turbi	ne fi	ring natural gas w	rith (	distillate oil
					÷				•

Section [4] of [4] CT-2 – Power Block 3

# **Emissions Unit Control Equipment**

1.	Control Equipment/Method(s) Description:  Dry Low NO <sub>x</sub> combustion - natural gas firing.
	Selective Catalytic Reduction (SCR) – natural gas firing/distillate oil firing.
	Water Injection – distillate oil firing.
,	
2.	Control Device or Method Code(s): 025, 065, 028

Section [4] of [4] CT-2 – Power Block 3

# **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

# **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughpu	ut Rate:	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: 2,04	5 million Btu/hr	
4.	Maximum Incineration Rate:	pounds/hr	
		tons/day	
5.	Requested Maximum Operating	Schedule:	
		hours/day	days/week
		weeks/year	<b>8,760</b> hours/year
6.	Operating Capacity/Schedule Co Heat input is higher heating valu temperature; MW nominal rating.	e (HHV) with natural gas; hea	t input at 59°F turbine inlet

DEP Form No. 62-210.900(1) – Form 0437512\4\4.3\PEF\_KFK\_Form1\_EU2.doc Effective: 06/16/03 16 1/31/2005

Section [4] of [4] CT-2 – Power Block 3

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

# **Emission Point Description and Type**

Identification of Point on Flow Diagram: Stack Exh.		2. Emission Point	Гуре Code:
3. Descriptions of Emission Exhausts through a single	stack.		
4. ID Numbers or Descriptio	ns of Emission Ur	nits with this Emission	n Point in Common:
<ol><li>Discharge Type Code:</li><li>V</li></ol>	<ol><li>Stack Height</li><li>125 feet</li></ol>	<b>:</b>	7. Exit Diameter: 19 feet
8. Exit Temperature: 190°F	9. Actual Volumetric Flow Rate: 1,009,487 acfm		10. Water Vapor: %
11. Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13. Emission Point UTM Coordinates Zone: 17 East (km): 414.4 North (km): 3073.9		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Temperature and flow for I		turbine inlet.	·

Section [4] of [4] CT-2 – Power Block 3

# D. SEGMENT (PROCESS/FUEL) INFORMATION

# Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type):

	Natural Gas				
2.	Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet		
4.	Maximum Hourly Rate: 2.082	5. Maximum Annual Rate: 17,392		6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum % Ash:		9.	Million Btu per SCC Unit: 1,030
10.	10. Segment Comment:  Based on 1,030 BTU/CF (HHV); maximum hourly at 20°F; annual at 59°F; turbine inlet temperatures.				
Se	gment Description and Ra	ite: Segment 2	of <u>2</u>		
1	Segment Description (Process/Fuel Type): Distillate Fuel Oil				
1.		0055/1 doi 1 y po ).			
1.		505561 dei 13po).			
1.		, , , , , , , , , , , , , , , , , , ,			
			3. SCC Units		ons Used
2.	Distillate Fuel Oil  Source Classification Code	e (SCC):		Gallo	ens Used  Estimated Annual Activity Factor:
2.	Source Classification Code 2-01-001-01  Maximum Hourly Rate: 16.04	e (SCC):	Thousand Annual Rate:	Gallo 6.	Estimated Annual Activity

Section [4] of [4] CT-2 – Power Block 3

# E. EMISSIONS UNIT POLLUTANTS

# List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
РМ			EL
SO <sub>2</sub>			EL
NO <sub>x</sub>	026	065	EL
со			EL
voc	·		EL
SAM			EL
			-

#### 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.	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:
1	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

Section [4] of [4] CT-2 – Power Block 3

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

1.	Control Technology Review and Analysis (Rules 62-212.400(6) 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(5)(h)6., 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			
A	dditional Requirements for Title V Air Operation Permit Applications			
1.	Identification of Applicable Requirements			
	☐ Attached, Document ID: ☐ Not Applicable			
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)			
ļ	☐ 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:			
	✓ Not Applicable			

# Additional Requirements Comment

**EMISSIONS UNIT INFORMATION** 

of

[4]

Section [4]

	,	

