Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603

June 5, 1997

Mr. Clair H. Fancy, P.E., Chief Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

RE:

Revision to Title V Application

File No. 1050223-003-AC (PSD-FL-190) Tiger Bay Limited Partnership, Polk County

ATTN:

Title V Section - Mr. Scott Sheplak, P.E.

Dear Scott:

On January 8, 1997, the compliance date for the combustion turbine to achieve the NO, emission limit of 97.2 lb/hr (equivalent to 15 ppmvd corrected to 15% O₂) was revised with Final Permit Amendment No. 1050223-003-AC (PSD-FL-190) to no later than December 31, 1998. This submittal provides information for the Title V application relative to the revised permit which allows for either appropriate combustion technology or the use of selective catalytic reduction (SCR) to achieve compliance. Information in the application form was updated and is presented in both paper and computerized versions. The Responsible Official's and the Professional Engineer's statements have been included.

Please call if you have any questions.

Sincerely,

Kennard F. Kosky, P.E.

Principal

KFK/lcb

cc: Jeffrey Keenan, DESTEC Energy Jeffrey Fassett, DESTEC Energy Ken Nash, Tiger Bay Limited Partnership

File (2)



RECEIVED

AUG 29 1997

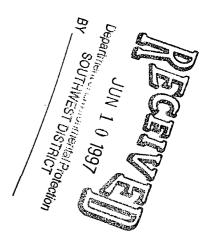
BUREAU OF AIR REGULATION

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JUN 06 1997

BUREAU OF AIR REGULATION





Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Ken Nash, President

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Tiger Bay Limited Partnership Street Address: 2500 City West Blvd Suite 150

> City: Houston State: TX

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(713) 735-4124

Fax: (713) 735-4169

Zip Code: 77042

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Date

5/29/97

^{*} Attach letter of authorization if not currently on file.

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, except as particularly noted herein*, that:

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here $[\mathbf{x}]$ if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature 2 Date

Date

Attack any exception to certification statement.

7

DEP Form No. 62.210.900(1) - Form

ATTACHMENT TB-FE-2 FACILITY PLOT PLAN



Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee. Florida 32399-2400

Virginia B. Wetherell Secretary

September 8, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, C.E.P. Director of Environmental Services Florida Power Corporation 3201 Thirty-fourth Street South Post Office Box 14042 St. Petersburg, Florida 33733 813-866-4387

Acis Rin Plane T

Re: Transfer of Permits

Project Nos. 1050223-004-AO and 1050223-005-AC

Title V Application Revision

Dear Mr. Pardue:

On August 14, 1997, the Department received your completed "Applications For Transfer Of Permits." Pursuant to Rule 62-4.120, F.A.C., Transfer of Permits, the Department hereby approves the transfer of permits numbered PSD-FL-190/AC53-214903 and AO53-261950 for the Tiger Bay Cogeneration Facility, located at 3219 State Road 630 West, Fort Meade, Polk County, Florida, from the Tiger Bay Limited Partnership to the Florida Power Corporation.

Included with your letter requesting the permit transfers were revised pages to this facility's Title V Operation Permit Application. However, the necessary Professional Engineer certification was not included with your submission. Please provide this document as soon as possible. Please note that Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to revisions to the application. Please complete and submit a new P.E. certification statement page from the new long application form. DEP Form No. 62-210.900, effective March 21, 1996 (enclosed).

The Department hereby transfers the permits as follows:

CHANGE PERMITTEE FROM:

Ms. Jeanne Benedetti Vice President Tiger Bay Limited Partnership Transfer of Permits September 8, 1997 Page 2 of 3

CHANGE PERMITTEE TO:

Mr. W. Jeffrey Pardue, C.E.P. Director of Environmental Services Florida Power Corporation

A person whose substantial interests are affected by these permit amendments may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of receipt of these permit amendments. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code. Mediation is not available for this action.

A petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by the petitioner, if any; (e) A statement of facts which the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in these permit amendments. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

These permit amendments are final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time these permit amendments will not be effective until further order of the Department.

When the Orders (Permit Amendments) are final, any party to the Orders has the right to seek judicial review of the Orders pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appealate 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 Department.

Transfer of Permits September 8, 1997 Page 3 of 3

A copy of this letter shall be filed with the referenced permits and becomes a part of the permits.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

tor

Howard L. Rhodes, Director Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that these TRANSFER OF PERMITS were sent by certified mail (*) before the close of business on 9-9-9- to the person(s) listed:

Mr. W. Jeffery Pardue, Florida Power Corporation*

Ms. Jeanne Benedetti, Tiger Bay L. P.*

Mr. Jerry Kissel, Southwest District

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)

(Date)



STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR TRANSFER OF PERMIT

. / AOS.	<u>FL-190 / AC53-219031,</u> Date Issued <u>N</u> 3-261950	I/A Date ExpiresN/A
\	<u></u>	
TRANS	FER OF TITLE V APPLICATION, submitted 6/13/96, a	as amended 5/29/97
	NOTIFICATION OF SA	ALE OR LEGAL TRANSFER
Source Name:	Tiger Bay Cogeneration Facility	County: Polk
Source Location:	3219 State Road 630	City: Fort Meade, 33841
Permittee Name:	Tiger Bay Limited Partnership / Jeanne Benedetti	Title: <u>V.P., Central FL DGE, Inc. A General Partner</u>
Mailing Address:	2500 CityWest Blvd. , Suite 150	·
	Houston, TX 77042	
Sworn to and subs County, Tor this City this C	e event the department agrees to the transfer of permit. scribed before me at 100 (4) day of 19 917. Notary Public Notary Public No Comm Exp. 5/17/98 onded By Service Ins No. CC473016 Permally Known (10ther LD.) REQUEST FOR The	Signature of Permittee V.P., Central Florida DGE, Inc. A General Partner Date: Title RANSFER OF PERMIT
Source Name:	Tiger Bay Cogeneration Facility	
		Title: Director Environmental Services
Applicant Name:	Florida Power Corporation / W. Jeffrey Pardue, CEP	
Applicant Name:	Florida Power Corporation / W. Jeffrey Pardue, CEP 3201 34th Street South, MAC H2G	
Applicant Name:	Florida Power Corporation / W. Jeffrey Pardue, CEP	
Applicant Name: _ Mailing Address: _	Florida Power Corporation / W. Jeffrey Pardue, CEP 3201 34th Street South, MAC H2G St. Petersburg, FL 33711	
Applicant Name: Mailing Address: Project Engineer:	Florida Power Corporation / W. Jeffrey Pardue, CEP 3201 34th Street South, MAC H2G St. Petersburg, FL 33711 Name: Robert W. Anderson	Telephone:(813) 866-4387
Applicant Name: _ Mailing Address: _	Florida Power Corporation / W. Jeffrey Pardue, CEP 3201 34th Street South, MAC H2G St. Petersburg, FL 33711 Name: Robert W. Anderson 3201 34th Street South, MAC GV44	Telephone: <u>(813) 866-4387</u>
Applicant Name: Mailing Address: Project Engineer:	Florida Power Corporation / W. Jeffrey Pardue, CEP 3201 34th Street South, MAC H2G St. Petersburg, FL 33711 Name: Robert W. Anderson	Telephone:(813) 866-4387

^{*} Attach letter of authorization if other than owner or corporate officer.





February 16, 1998

RECEIVED

FEB 18 1998

BUREAU OF AIR REGULATION

FACILY TO NO. 1050223-002-AV

Mr. Scott Sheplak
Title V Permit Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

Dear Mr. Sheplak:

Re: Tiger Bay Cogen Facility

As you know, the Tiger Bay Cogeneration Facility was purchased by Florida Power Corporation (FPC) from DESTEC in 1997. FPC is in the process of obtaining a site certification for an additional 10.5 megawatts (MW) of steam electric capacity. This reflects the actual steam capacity of the unit, which is a nominal 85.5 MW.

This change necessitates a corresponding amendment to the Title V permit application in order to reflect the unit's actual capacity. A revised Title V application page describing the capacity of the steam turbine is enclosed as Attachment 1. Attachment 2 contains a P.E.-certified certification of the capacity of the steam turbine. In addition, Tiger Bay became an acid rain facility as a result of the FPC purchase. Attachment 3 contains copies of the acid rain permit application and certificate of representation for Tiger Bay.

Thank you for your processing of this request. Please contact Mr. Mike Kennedy at (813) 866-4344 if you have any questions or comments.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director

Attachments

Attachment 1

Emissions	Unit	Informa	tion	Section	1	of	3	

Combustion Turbine GE7

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1.	ੌ,	s Unit Addressed in This Section Γ) General Electric - MS70001FA	(limit to 60 characters)
2.	Emissions Unit Identific	ation Number: [] No Corre	esponding ID [] Unknown
3.	Emissions Unit Status Code: A	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code: 49
6.	The CT exhausts through a serves a separate generate 214903/PSD-FL-190; as am (e.g., fuel oil tank) have no	at (limit to 500 characters): a HRSG. The nominal rating of the Cor with a nominal rating of 85.5MW. beended) and is capable of accommodot been installed and unit has not ope EPA's Acid Rain Program, pursuant to	The unit was permitted (AC53- lating fuel oil. Associated facilities erated on distillate oil. This unit is

Attachment 2



INTEROFFICE CORRESPONDENCE

Performance Services

MAC

231-5292

OFFICE

MAC

TELEPHONE

SUBJECT: Tiger Bay Steam Turbine Capabilities

TO: Michael J. Kennedy

DATE: November 20, 1997

Performance Services has reviewed the design specifications for the steam turbine at Tiger Bay and concluded that the steam turbine is capable of operating continuously at 105 percent of initial pressure (1537.5 psia) with control valves wide open. We expect to generate 87.4 gross megawatts at the following steam inlet conditions:

- steam flow of 549,675 lbs/hr
- Throttle steam pressure of 1537.5 psia
- Throttle steam temperature of 1000 deg F
- Exhausting to 1.62 psia

If you have any further questions concerning Tiger Bay, please call me at Ext. 231-5292.

Dario B. Zuloaga, P.E. License # 0032729 (FL) Lead Principal Engineer Performance Services

cc: Bob Anderson

Attachment 3



United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258 Expires 1-31-96

Phase II Permit Application

Page 1

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

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

For more information This submission is:	<u> </u>	and refer to 40 CFR 72	.30 and 72.31	
Tiger Bay Facili	ty	FL		7699
Plant Name		State	ORIS	Code
a	Comp b	oliance Plan c	d	е
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline

1	Yes	No		
	Yes		_	
	Yes			
	Yes		_	
	Yes		_	
	Yes			
,	Yes			
	Yes			
	Yes			

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

	For each unit that will be repowered, the Repowering Extension Plan form is included and the	Repowering	Technology
--	--	------------	------------

Petition form has been submitted or will be submitted by June 1, 1997.

Tiger Bay Facility

Plant Name (from Step 1)

Phase II Permit - Page 2

STEP 4 Read the standard requirements and certification, enter the name of the designated repre-sentative, and sign and date

Standard Requirements

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued

by the permitting authority; and (ii) Have an Acid Rain Permit.

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR parts 74, 75, and 76.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine

compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR parts 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

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

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

(ii) All emissions monitoring information, in accordance with 40 CFR part 75;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program, and,

Tiger Bay Facility			
Plant Name (from Step 1)			
		-	Phase II Permit - Page 3

Recordkeeping and Reporting Requirements (cont.)

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

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act. (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
 (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the
- affected units at the source.

 (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO, averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the
- affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

 (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other

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

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

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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 W. Jeffrey Pardue, C.E.P.	
Signature	Date /2/23/97

STEP 5 (optional)
Enter the source AIRS
and FINDS identification
numbers, if known

AIRS	 ·
FINDS	



United ! es **Environmental Protection Agency** Acid Rain Program

OMB No. 2060-0221 Expires 1-31-96

age 1

WEITH	Certi	ficate of R	epres	entatic	n	Р
	For more inform	nation, see instructions and ref n is:		24		,
	This submissio	n includes combustion or proce	ess sources unde	er 40 CFR part 74		
STEP 1 Identify the source by	Plant Name			State	ORIS Code	
plant name, State, and, if applicable, ORIS code from NADB.	Tiger Bay Cogeneration Facility		FL			
		. <u> </u>				
STEP 2 Enter requested information for the	Name	W. Jeffrey Pardue, CEI	P			
designated representative.	Address Florida Power Corporation					
		3201 34th Street Sout	th, MAC - H2	.G		
		St. Petersburg, FL 33	711			
	Phone Number	(813) 866-4387	Fax Numbe	(813)866	6-4926	
STEP 3 Enter requested information for the	Name					
alternate designated representative, if applicable.	Address					
						\Box
	Phone Number		Fax Number	r		

STEP 4 Complete Step 5, read the certifications, and sign and date. For a designated representative of a combustion or process source under 40 CFR part 74, the references in the certifica-tions to "affected unit" or "affected units" also apply to the combustion or process source under 40 CFR part 74 and the references to "affected source" also apply to the source at which the combustion or process

source is located.

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable, for the affected source and each affected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-theunit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

Certificate - Page 2 Page 1 of 1

The agreement by which I was selected as the alternate designated representative, if applicable, includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

	<u> </u>
Signature (designated representative)	Date 7/16/97
Signature (alternate designated representative)	Date

STEP 5
Provide the name of every owner and operator of the source and each affected unit (or combustion or process source) at the source. Identify the units they own and/or operate by boiler ID# from NADB, if applicable. For owners only, identify each state or local utility regulatory authority with ratemaking jurisdiction over each owner, if applicable.

Name Florida Power Corporation					Owner	✓ Operator
ID# 1	ID#	ID#	ID#	ID#	ID#	ID#
ID#	· ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities Florida Public Service Commission						
Name					Owner	Operator
ID#	ID#	ID#	ID#	ID#	ID#	· ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities						

Name					Owner ·	Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
1D#	ID#	ID#	.ID#	ID#	ID#	ID#
Regulatory Authorities						



June 23, 2000

Mr. Jonathan Holtom, P.E. Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Dear Mr. Holtom:

Re: Package Boiler Permit Application - FPC Tiger Bay Facility

As we discussed, enclosed are four originals of the appropriate pages of a modified construction permit application for the installation of a small, natural gas-fired package steam boiler at Florida Power Corporation's (FPC) Tiger Bay facility. The modification is a reduction in the proposed maximum annual hours of operation from 7,980 to 6,000. The pages affected by this change have been updated accordingly, including the potential annual pollutant emissions.

Please contact me at (727) 826-4334 if you have any guestions.

Sincerely,

J. Michael Kennedy, Q.E.P.

J. Michael 8- 2

Manager, Air Programs

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

Facility Owner/Company Name : Florida Power Corporation		
2. Site Name: Tiger Bay Facility	· · · · · · · · · · · · · · · · · · ·	
3. Facility Identification Number:	1050223 [] Unknown	
4. Facility Location : Ft. Meade		
Street Address or Other Locator:	3219 State Road 630 East	
City: Ft. Meade	County: Polk Zip Code: 33841	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No	

I. Part 1 - 1

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

Owner/Authorized Representative or Responsible Official

1.	Name and	Title of	Owner/A	uthorized	Representative	or Respo	nsible	Official	:
						.4			

Name:

W. Jeffrey Pardue, C.E.P.

Title:

Director, Environmental Services

2. Owner or Authorized Representative or Responsible Official Mailing Address:

Organization/Firm:

Florida Power Corporation

Street Address:

P.O. Box 14042, MAC BB1A

City:

St. Petersburg

State:

Zip Code:

33733 . .

Sugar Santa

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: (727)826-4301

Fax: (727)826-4216

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.

Signature

6/23/00

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I. Part 2 - 1

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

^{*} Attach letter of authorization if not currently on file.

Scope of Application

		, et	Permit
Emissions Unit ID	Description of Emissions Unit	and the second second	Type
004	Natural gas-fired package steam boiler	•	

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I. Part 3 - 1

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

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Natural gas-fired package steam boiler	
Emissions Unit Details	
1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit: Manufacturer: Cleaver-Brooks	Model Number: DL-94
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	Degrees Fahrenheit Seconds Degrees Fahrenheit
Emissions Unit Operating Capacity	
1. Maximum Heat Input Rate: 100	mmBtu/hr
2. Maximum Incinerator Rate:	lb/hr tons/day
3. Maximum Process or Throughput Rate:	
4. Maximum Production Rate: 85000	lbs steam/hr
5. Operating Capacity Comment : Heat input capacity is 100 mmBtu/hr. Steam general	erating capacity is 85,000 lb/hr.
Emissions Unit Operating Schedule	
Requested Maximum Operating Schedule:	7. 4/1
24 hours/day 52 weeks/year	7 days/week 6,000 hours/year

III. Part 4 -

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

Application Processing Fee

Check one:

] Attached - Amount :

\$0.00

[X] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Addition of natural gas-fired package steam boiler for providing supplemental steam.

2. Projected or Actual Date of Commencement of Construction:

01-Jul-20.00

3. Projected Date of Completion of Construction:

30-Aug-20**00**

Professional Engineer Certification

1. Professional Engineer Name:

Jennifer A. Stenger

Registration Number:

0052125

2. Professional Engineer Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: P.O. Box 14042, MAC BB1A

City: St. Petersburg

State: FL Zip Code: 33733

3. Professional Engineer Telephone Numbers:

Telephone: (727)826-4132

Fax: (727)826-4216

4. Professional Engineer Statement:

- I, the undersigned, hereby certify, except as particularly noted herein*, that :
- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here $[\checkmark]$ if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions

Signature 7. Date

Osignature 7. Date

I. Part 6 - 1

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

Application Contact

1. Name and Title of Application Contact:

Name: J. Michael Kennedy, Q.E.P.
Title: Manager, Air Programs

2. Application Contact Mailing Address:

Organization/Firm:

Florida Power Corporation

Street Address:

P.O. Box 14042, MAC BB1A

City:

St. Petersburg

State:

FL Zip Code:

33733

3. Application Contact Telephone Numbers:

Telephone:

(727)826-4334

Fax:

(727)826-4216

Application Comment

This application is for the proposed addition of a natural gas-fired package steam boiler in order to provide a backup steam supply. The heat input capacity of the boiler is 100 mmBtu/hr, which subjects it to 40 CFR Part 60, Subpart Dc.

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section Natural gas-fired package steam boiler	
	gment <u>l</u>
1. Segment Description (Process/Fuel Ty	ype and Associated Operating Method/Mode):
Natural gas	
2. Source Classification Code (SCC):	20100201
3. SCC Units: Million Cubic Feet Burn	ed (all gaseous fuels)
4. Maximum Hourly Rate: 0.10	5. Maximum Annual Rate: 600.00
6. Estimated Annual Activity Factor:	.
7. Maximum Percent Sulfur: 0.00	8. Maximum Percent Ash: 0.00
9. Million Btu per SCC Unit: 1,040	
10. Segment Comment :	

III. Part 8 - 1

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

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section	1
Natural gas-fired package steam boiler	

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	Pollutant Regulatory Code
1 - SO2			EL
2 - NOX			EL
3 - PM			EL
4 - PM10			EL
5 - CO			EL
6 - VOC			EL
7 - SAM			EL

III. Part 9a - 1

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

Emissions Unit Information Section1_	
Natural gas-fired package steam boiler	
Pollutant Potential/Estimated Emissions: Pollutant 1	
1. Pollutant Emitted: SO2	
2. Total Percent Efficiency of Control: %	
3. Potential Emissions :	
0.1400000 lb/hour	0.4200000 tons/year
4. Synthetically Limited?	
[] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:	
to	tons/year
6. Emissions Factor 1 Units : gr/100 CF	
Reference: Fuel analysis	
7. Emissions Method Code: 2	
8. Calculations of Emissions :	
Assumed max. S content of 1 gr/100 CF and 6000 hours of operation/year.	
9. Pollutant Potential/Estimated Emissions Comment:	

III. Part 9b - 1

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

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section Natural gas-fired package steam boiler	1		
Pollutant Potential/Estimated Emissions:	Pollutant	2	
1. Pollutant Emitted: NOX		*	
2. Total Percent Efficiency of Control:	0.00	% 	
3. Potential Emissions: 10.0000000 lb/	hour		30.0000000 tons/year
4. Synthetically Limited? [X] Yes [] No		er (j.e.)	
5. Range of Estimated Fugitive/Other Emissio	ns:	to	tons/year
6. Emissions Factor 0 Reference: Manufacturer data	Uni	ts : lb/mmBtu	
7. Emissions Method Code: 0			
8. Calculations of Emissions:			
NOx emissions of 0.10 lb/mmBtu from manufainput of 100 mmBtu/hr and 6000 hours/year of		Annual max. tor	as of NOx from max. heat
9. Pollutant Potential/Estimated Emissions Co	mment :		
		es e	

III. Part 9b - 2

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

Emissions Unit Information Section 1 Natural gas-fired package steam boiler	
Pollutant Potential/Estimated Emissions: Pollutant 4	
1. Pollutant Emitted: PM10	
2. Total Percent Efficiency of Control: %	
3. Potential Emissions : 0.8000000 lb/hour	2.4000000 tons/year
4. Synthetically Limited? [] Yes · [X] No	
5. Range of Estimated Fugitive/Other Emissions:	tons/year
6. Emissions Factor 8 Units: lb/mmCF Reference: AP-42, nat. gas fire	
7. Emissions Method Code: 3	
8. Calculations of Emissions: AP-42 factor for PM (assume all PM is PM10) of 8 lb/mmCF and boiler calculations based on hourly rate times 6,000 hours/year.	apacity of 0.10 mmCF/hour.
9. Pollutant Potential/Estimated Emissions Comment :	

III. Part 9b - 6

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

	nissions Unit Information Section1tural gas-fired package steam boiler							
Pollutant Potential/Estimated Emissions: Pollutant 5								
1.	Pollutant Emitted: CO							
2.	Total Percent Efficiency of Control: %							
3.	Potential Emissions : 8.4000000 lb/hour 25.2000000 tons/year							
4.	Synthetically Limited? [] Yes [X] No							
5.	Range of Estimated Fugitive/Other Emissions: to tons/year							
6.	Emissions Factor 84 Units: lb/mmCF Reference: AP-42							
7.	Emissions Method Code: 3							
8.	8. Calculations of Emissions : AP-42 factor of 84 lb/mmCF and max. nat. gas firing capacity of 0.10 mmCF/hr. Annual emissions from hourly rate times 6,000 hours/year.							
9.	Pollutant Potential/Estimated Emissions Comment :							

III. Part 9b - 8

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

Na	Emissions Unit Information Section1 Natural gas-fired package steam boiler Pollutant Potential/Estimated Emissions: Pollutant6						
1.	Pollutant Emitted: VOC						
2.	Total Percent Efficiency of Control: %						
3.	Potential Emissions: 0.6000000 lb/hour 1.8000000 tons/year						
4.	Synthetically Limited? [] Yes [X] No						
5.	Range of Estimated Fugitive/Other Emissions: to tons/year						
6.	Emissions Factor 6 Units: lb/mmCF Reference: AP-42						
7.	Emissions Method Code : 3						
8.	Calculations of Emissions: AP-42 factor of 6 lb/mmCF and max. nat. gas firing capacity of 0.10 mmCF/hr. Annual emissions from hourly rate times 6,000 hours/year.						
9.	Pollutant Potential/Estimated Emissions Comment :						

III. Part 9b - 10

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

Pollutant Information Section Pollutant Information Section Allowable Emissions 1 Allowable Emissions														
									1.	Basis for Allowable Emissions Code:	OTHER			
2.	Future Effective Date of Allowable Emission	ons :	-											
3.	Requested Allowable Emissions and Units	1.00		grain S/100 CF										
4.	Equivalent Allowable Emissions:													
	0.14	lb/hour	0.42	tons/year										
5.	Method of Compliance :			_										
	Fuel analysis													
6.	Pollutant Allowable Emissions Comment (I	Desc. of Related O	perating M	Method/Mode):										
	Allowable based on max. sulfur content of 1 gr	r/100 CF of natural g	as.											

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

	Natural gas-fired package steam boiler						
Po	Pollutant Information Section 2						
All	lowable Emissions 1						
1.	Basis for Allowable Emissions Code :]	ESCPSD				
2.	Future Effective Date of Allowable Em	issions :					
3.	Requested Allowable Emissions and Un	nits :	0.10		lb/mmB	tu	
4.	Equivalent Allowable Emissions :						
	. 10.00	lb/hour		30.00	t	tons/year	
5.	Method of Compliance :						
	Stack test, EPA Method 20						
6.	Pollutant Allowable Emissions Comme	nt (Desc. of R	elated Ope	erating l	Method/	Mode) :	
	Based on emission rate of 0.10 lb/mmBtu a	and 6000 hours	/year.				

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

Effective: 3-21-96

	nissions Unit Information Section utural gas-fired package steam boiler	1		
Po	Hutant Information Section 4			
<u>All</u>	lowable Emissions 1		•	
1.	Basis for Allowable Emissions Code:	OTHER		
2.	Future Effective Date of Allowable Emission	ons :		
3.	Requested Allowable Emissions and Units :	0.80		lb/hr
4.	Equivalent Allowable Emissions:			
	0.80	lb/hour	2.40	tons/year
5.	Method of Compliance :		-	
	VE, EPA Method 9			
6.	Pollutant Allowable Emissions Comment (I	Desc. of Related Op	perating :	Method/Mode) :
	If VE < 10%, stack test not required.	. •		•

III. Part 9c - 5

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DEP Form No. 62-210.900(1) - Form Effective: 3-21-96

Na	tural gas-fired package steam boiler			
Po	llutant Information Section 5			
<u>Al</u>	lowable Emissions 1			
1.	Basis for Allowable Emissions Code:	OTHER	_	
2.	Future Effective Date of Allowable Emissi	ons:		
3.	Requested Allowable Emissions and Units	8.40	1	b/hr
4.	Equivalent Allowable Emissions:			
	8.40	lb/hour	25.20	tons/year
5.	Method of Compliance :			
	Good combustion practices			
6.	Pollutant Allowable Emissions Comment (Desc. of Related O	perating M	ethod/Mode) :
		•		

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

Emissions Unit Information Section

Effective: 3-21-96

Natural gas-fired package steam boiler	_1		
Pollutant Information Section 6			
Allowable Emissions 1			
Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emission	ons :		
3. Requested Allowable Emissions and Units	: 0.60		/hr
4. Equivalent Allowable Emissions:			
0.60	lb/hour	1.80	tons/year
5. Method of Compliance:			
Good combustion practices			
6. Pollutant Allowable Emissions Comment (Desc. of Related O ₁	perating Mo	ethod/Mode):
•	• •		

DEP Form No. 62-210.900(1) - Form Effective: 3-21-96

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Natural gas-fired package steam boiler			
Visible Emissions Limitation: Visible Emissions L	imitation	<u> </u>	
1. Visible Emissions Subtype: 10			
2. Basis for Allowable Opacity: OTHER			
2. Basis for Allowable Opacity: OTHER		·	
3. Requested Allowable Opacity:			
Normal Conditions:	10	%	
Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	. 0	% min/hour	
4. Method of Compliance :	•	1,111	
Annual compliance test, EPA Method 9			
5. Visible Emissions Comment :		<u>-</u> ·	
VE limit under normal conditions at full load.			

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

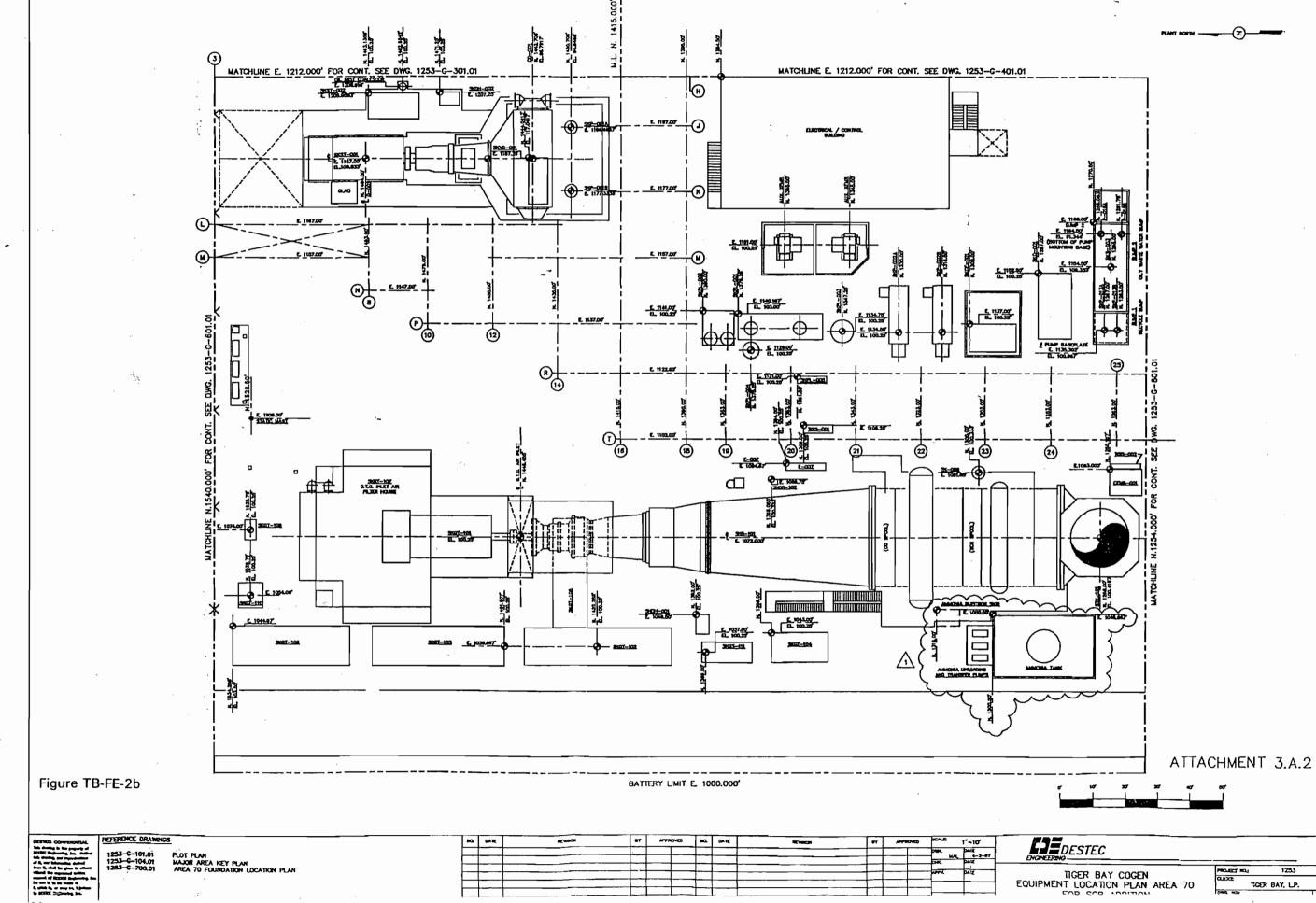
Effective: 3-21-96

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Natural gas-fired package steam b				
Visible Emissions Limitation:	Visible Emissions Lir	nitation		
1. Visible Emissions Subtype :			• • • • • • • • • • • • • • • • • • •	
			••	
2. Basis for Allowable Opacity:	RULE			
3. Requested Allowable Opacity				
	ormal Conditions:		%	
Maximum Period of Excess (tional Conditions:	100 60	%	
Maximum Feriod of Excess (Jpacity Allowed .		min/hour	
4. Method of Compliance:		, 1:	i _v ,	
EPA Method 9				
5. Visible Emissions Comment:				
1. Rule 62-210.700. 2. Max. pe	eriod of excess opacity	allowed - 2	hours/24 hours.	

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

Effective: 3-21-96



ATTACHMENT TB-FE-14 COMPLIANCE REPORT AND PLAN

ATTACHMENT TB-FE-14 COMPLIANCE PLAN

Tiger Bay Limited Partnership

This attachment presents information on the emission units in this application that provide certification that the emission units are in compliance with the applicable requirements as of the date of the application.

COMBUSTION TURBINE:

In accordance with Chapter 62 - 213, F.A.C., and Tiger Bay's FDEP Permit No. AC53-214903/ PSD-FL-190 (as amended) compliance status and requirements are presented herein and listed in the table on the following page.

Initial Compliance Test

The initial compliance test was performed on October 19-23, 1994 to verify that the unit was in compliance. The results of the test is summarized in the submittal of the certificate of completion of construction and was submitted to FDEP in December 1994.

Initial compliance testing for oil-firing has not yet been performed. Such compliance tests will be performed in accordance with Specific Conditions 8, 9, and 10 of AC53-214903 and summarized in the attached table.

Annual Compliance Test

An annual compliance test must be performed to verify compliance with the NO_x and CO requirements while the CT is fired on natural gas.

Compliance with NO, Emission Limits

The compliance date for the combustion turbine to achieve the NO_x emission limit of 97.2 lb/hr (equivalent to 15 ppmvd corrected to 15% O₂) was revised with Final Permit Amendment No. 1050223-003-AC (PSD-FL-190) to no later than December 31, 1998. Meeting this emission limit will be made with either appropriate combustion technology improvements or selective catalytic reduction (SCR). If SCR is used, the schedule for engineering, procurement, construction, and testing will be complete prior to December 31, 1998.

1

ZERO LIQUID DISCHARGE (ZLD) SYSTEM:

In accordance with Chapter 62-213 and Tiger Bay's FDEP Permit AC53-230744, the following is the compliance status of the ZLD system.

Initial Compliance Test

The initial compliance test for VE using EPA Method 9 was performed on 8/24/94. The results found zero visible emissions compared with the permitted limit of 5 percent opacity.

Annual Compliance Test

The ZLD is required to perform an annual VE test. In 1995 and during the period through June 15, 1996, the ZLD did not operate. In accordance with Rule 62-297.310(7)(a)3.a., an annual test was not required. A VE test will be performed within 30 days of continued operation of the ZLD.

Combustion Turbine Compliance Values, Reporting, and Test Methods

Compliance Parameter	Compliance Values ^a	Compliance Reporting	Compliance Test Method (EPA)
Run Hours	8760	Annual Operating Report (AOR)	None
Heat Input	1,710 MMBtu/hr	Quarterly and AOR	Fuel Analysis
NO _x	15 ppmvd @ 15% O ₂ ; 97.2 lb/hr ^b ; 425.7 TPY (gas)	Annual Compliance Teste; Quarterly and AOR	20
	25 ppmvd @ 15% O ₂ ; 161.9 lb/hr; 709.1 TPY (gas)	Annual Compliance Teste; Quarterly and AOR	20
	42 ppmvd @ 15% O ₂ ; 326 lb/hr; 48.9 TPY (oil)	Initial Compliance Test ^c and AOR	20
CO	15 ppmvd; 48.8 lb/hr; 213.7 TPY (gas)	Annual Compliance Test ^c and AOR	10
	30 ppmvd; 98.4 lb/hr; 14.8 TPY (oil)	Initial Compliance Test ^c	10
VOC	2.8 lb/hr; 12.3 TPY (gas)	Annual Compliance Test ^c and AOR	18/25A
	7.5 lb/hr; 1.1 TPY (oil)	Initial Compliance Test ^c	18/25A
Visible Emissions (VE)	10% (gas)	Annual Compliance Test ^c and AOR	
	20% (oil)		
PM10	9 lb/hr; 39.4 TPY (gas)	Only Initial Compliance Test required/AOR	5 or 17
	17 lb/hr; 2.6 TPY (oil)	Initial Compliance Test ^c and AOR	201A or 202
SO ₂	4.86 lb/hr; 21.3 TPY (gas)	Annual Compliance Test ^c	Fuel Analysis
	99.7 lb/hr; 15 TPY (oil)	Initial Compliance Test ^c	Fuel Analysis
H ₂ SO ₄	5.95x10 ⁻¹ lb/hr; 26 TPY (gas)	Annual Compliance Test ^c	Fuel Analysis
	1.22 lb/hr; 0.183 TPY (oil)	Initial Compliance Test ^c	Fuel Analysis

Note: Initial testing for Hg, and Be when oil is fired is requested to be deleted from permit per FDEP May 19, 1995 guidance (DARM-PER/GEN-18)

^a The above emission limits are based on baseload conditions @ 27°F.

^b The NO_x maximum limit will be lowered to 97.2 lb/hr (equivalent to 15 ppmv @ 15% O₂) on 12/31/98 using appropriate combustion improvements or SCR.

^c Baseload conditions.

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	Secondary Control Device Code	4. Pollutant Regulatory Code
NOX SO2 CO PM10 VOC SAM	024	065	EL EL EL EL NS
· · · · · · · · · · · · · · · · · · ·			·
		•	

Emissions	Unit Information Section	n 1	of	3	
Diffigarons	Chit illioi mation section	**	O.		

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: NOX
2. Total Percent Efficiency of Control: 90 %
3. Potential Emissions: 161.9 lb/hour 709.1 tons/year
4. Synthetically Limited? [] Yes [x] No
5. Range of Estimated Fugitive/Other Emissions:
[] 1 [] 2 [] 3 to tons/yr
6. Emission Factor: 161.9 lb/hr
Reference: See Comment
7. Emissions Method Code:
[x]0 []1 []2 []3 []4 []5
8. Calculation of Emissions (limit to 600 characters):
Potential-to-emit authorized by FDEP permit AC53-214903/ 1050223-003-AC/PSD-FL-190, as amended (equivalent to 25 ppmvd @ 15% O2).
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):
Emission Factor Ref.: AC53-214903/1050223-AC/PSD-FL-190 as amended. Potential Emissions based on oil (lb/hr) & gas (annual) firing. Maximum lb/hr when firing fuel oil is 326 lb/hr & 48.9 TPY.

Emissions	Unit Inform	nation Section	1	_ of _	3
Allowable	Emissions	(Pollutant ident	ified o	n front	page)

A	
	٠

Basis for Allowable Emissions Code: OTHER					
Future Effective Date of Allowable Emissions:					
Requested Allowable Emissions and Units:					
161.9 lb/hr*					
Equivalent Allowable Emissions: 161.9 lb/hour 709.1 tons/ye	ear				
Method of Compliance (limit to 60 characters):					
Annual Compliance Test, EPA Method 20 Annual Fuel Usage- AFU					
Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):					
*709.1 TPY (equivalent to 25 ppmvd @ 15% O2). Natural gas firing (refer to FDEP AC53-214903 and 1050223-003-AC)	Permit				
	Future Effective Date of Allowable Emissions: Requested Allowable Emissions and Units: 161.9 lb/hr* Equivalent Allowable Emissions: 161.9 lb/hour 709.1 tons/ye Method of Compliance (limit to 60 characters): Annual Compliance Test, EPA Method 20 Annual Fuel Usage- AFU Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/N (limit to 200 characters): *709.1 TPY (equivalent to 25 ppmvd @ 15% O2). Natural gas firing (refer to FDEP)				

В.

1.	Basis for Allowable Emissions Code: OTHER				
2.	Future Effective Date of Allowable Emissions:				
3.	Requested Allowable Emissions and Units:				
	326 lb/hr*				
4.	Equivalent Allowable Emissions: 326 lb/hour 48.9 tons/year				
5.	Method of Compliance (limit to 60 characters):				
	Initial Compliance Test				
6.	6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):				
	*48.9 TPY (42 ppmvd @ 15% O2) Distillate Fuel-Oil firing which the EU is capable of accommodating. Annual tons/year based on 300 hours/year operation.				

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

1.	Basis for Allowable Emissions Code: OTHER					
2.	Future Effective Date of Allowable Emissions:					
3.	Requested Allowable Emissions and Units:					
	97.2 lb/hr*					
4.	Equivalent Allowable Emissions: 97.2 lb/hour 425.7 tons/year					
5.	Method of Compliance (limit to 60 characters):					
	Annual Compliance Test, EPA Method 20; Annual Fuel Usage					
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):					
	*425.7 TPY (equivalent to 15 ppmvd @ 15% O2) FDEP Permit AC53-214903/1050223-003-AC/PSD190. Compliance on or before 12/31/98.					

В.

Basis for Allowable Emissions Code: RULE		`	
Future Effective Date of Allowable Emissions:	·		
Requested Allowable Emissions and Units:			
Equivalent Allowable Emissions:	lb/hour		tons/year
Method of Compliance (limit to 60 characters): Quarterly Report			
(limit to 200 characters):		J	
	Future Effective Date of Allowable Emissions: Requested Allowable Emissions and Units: Equivalent Allowable Emissions: Method of Compliance (limit to 60 characters): Quarterly Report Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters): Excess Emissions allowed by Rule 62-210.700(1)	Future Effective Date of Allowable Emissions: Requested Allowable Emissions and Units: Equivalent Allowable Emissions: Ib/hour Method of Compliance (limit to 60 characters): Quarterly Report Pollutant Allowable Emissions Comment (Desc. of Related Operat (limit to 200 characters): Excess Emissions allowed by Rule 62-210.700(1) for startup, shutdown to the startup of the st	Future Effective Date of Allowable Emissions: Requested Allowable Emissions and Units: Equivalent Allowable Emissions: Method of Compliance (limit to 60 characters): Quarterly Report Pollutant Allowable Emissions Comment (Desc. of Related Operating Method (limit to 200 characters): Excess Emissions allowed by Rule 62-210.700(1) for startup, shutdown and relationships to the startup of th

ATTACHMENT TB-EU1-L3 DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT TB-EU1-L3 DETAILED DESCRIPTION OF CONTROL EQUIPMENT

The General Electric (GE) PG 7221 FA uses dry low-NOx combustion to control NOx emissions resulting from the combustion of natural gas. The control of NOx is accomplished by reducing the flame temperatures through the use of staged combustion techniques. At lower loads, the combustors operates in a diffusion mode with lean mixtures of air and gas. At higher loads, the combustors operate in a premix mode where gas and air are mixed prior to combustion. When fuel oil is fired, NOx emissions are controlled by water injection. Although not yet operated with oil firing, the water to fuel ratio for this machine is 1.2 at 72°F, based on data provided in the original air construction application. The control systems for the machine when firing natural gas and oil are internal to GE's digital control systems (DCS).

To achieve the NO_x emissions of 97.2 lb/hr (equivalent to 15% O₂), selective catalytic reduction (SCR) may be used. SCR reduces NO_x emissions by injection of ammonia into turbine exhaust flow upstream of a catalyst operating in temperatures ranging from 600 to 750°F. The ammonia reacts with NO_x to form nitrogen and water. In a combined cycle plant this temperature range is achieved within the heat recovery steam generator (HRSG). During the construction of the HRSG and as required by Specific Condition 15a of the original FDEP construction permit, a module was added to the HRSG to install SCR if required to meet the lower NO_x limit. At this time the SCR vendor has not been determined from a bidding process. A representative design used in budgetary estimates is included with this attachment.

7

MESSRS. SARGENT & LUXDY

TECHNICAL SPECIFICATION

OF

DRY SELECTIVE CATALYTIC NOX REMOVAL SYSTEM

FOR

TIGER BAY/POLK COUNTY

SPEC. NO. LAKICRO

Jun. 29, 1996



MITSUBISH: REAVY INDUSTRIES, LTD.

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§ 1. GENERAL DESCRIPTION

This specification covers the design specification and scope of supply for MITSUBISHI Dry Selective NOx Removal system(s).

- 1. NOx Removal Performance

 Offered SCR system is designed to achieve the performance described in section 2. TECENICAL SPECIFICATION and/or performance pequirements of Buyer's data sheets as attanched except where stated otherwise in this specification.
- Scope of Supply
 Any item which is not shown in this specification means
 Mitsubishi's Out of Scope.

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S & TECHNICAL SPECIFICATION
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1. SCR SYSTEM SPECIFICATION

· Type of Catalyst : HOWOGENEOUS HONEYCOMB TYPE · Nos. of SCR System : 1 : CTG/GE 7F · Flue Gas Source · Main Fuel Considered for SCR Design : NG · Supplementary Firing

. : Ruel of Supplementary Firing

2. REACTOR INLET FLUE GAS CONDITION

· Performance Case : 1

· Flue Gas Temperature Low (15/Hr): 3264000

· Flue Gas Temperature Low (15) · 220 · Flue Gas Temperature High · Flue Gas Main Component (%L%) 13 : 73.74 . 02 : 12.52 H20 : 2.14999 : 3.71 CO2 ÅI 55.:

· Other Five Gas Component

Particulate (Lb/Hr) : 6 S02 (ppmvd. \$ 15%02) : C 503 (ppmvd.3 15%02) : C

(ppmvd, 8 · 15%02) : 25

3. SCR PEFORMANCE DATA

(items marked **show** warranty values)

· Catalyst life (Years) : 🛂 3 · NOx Removai Performance NOx Removal Efficiency (%) : 題40 3CR Outlet NOx (ppmvd. 8 15%02) : 15 (ppmvd. 9 15%02) : **21**0 · Gas Side Pressure Drop (Inches WC) : ■2 ←

4. PREDICTED OTHER DATA

 Amnonia Consumption (Lb/Hr) : 1?1.2 (25 % AQUEGUS AMMONIA)

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5. LIMITATION ON OPERATION

· Reat Reasistance Temperature of Catalyst (57) 750

· Minimum Teaperature to Inject Ammonia (37) · 520

5. OVERALL HOUSING DIMENSION

 Interface Disensions at Reactor Inlet and/or Outlet (Rousing or Duct Internal Dimension)

4 × H = 27'-4 1 /4 7 × 65'-7 1 /4 7

- Gas Pass Dimensions of Boiler Side at Upstream of Reactor (ASSUMED)

"X x ii = 27'-4 1 /4 x 56'-3 .

Reactor internal Dimensions 6-078

- NOTE 1 lients) Marked '* show(s) MHI's assumption value(s).
 Flease let us know these data immediately to design properly.
 - There shall be no warranty owing to any causes or circumstances beyond control of this system including improper plant operation over this specification, or fly of abnormal flammable, fragmental insulation or rust from impstream equipments.
 - 3. Initial loading of catalyst modules shell be conducted after complete starting-up adjustment of plant.
 - Vinious temperature to inject amoenia is defined by SO3 concentration which is shown above.
 - 5. Materials

- Catalyst Module Frame

Carbon Steel

- SCR Housing
Casing & Structure

Carbon Steel
12GA Carbon Steel

Inner Liner Insulation/Mineral Wool

3 t

Insulation/Ceramic Piber

Carbon Steel

- Ammonia Injection System

Caroon Steel

6. Shipping Condition Module size for SCR Housing should be decided the largest one under following Transportation Limit. Maximum Legal Load with permits not Regarding Escorts.

12'-0' wide × 15'-0' overall height.

1 NO2 in NOx NO2/NOx ratio at SCR injet shall be less than 30%.

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\$ 3. SCOPE OF SUPPLY

SCOPE OF SUPPLY SHEET (1/3) MET! IKK YE **3**Y OUT CF 3ASE -OPTION OTHERS 39002 KD1233 1. 1 BASIC DESIGN 1.2 DETAIL DESIGN FOR CATALYST MODULE 1.3 DETAIL DESIGN FOR SCR HOUSING 0 1. 4 DETAIL DESIGN FOR MHS INJECTION SYSTEM 1. 5 CONTROL LOGIC 1.6 INSTRUCTION MANUAL (10 1.7 PE STAMP 2. CATALYST 2. 1 CATALYST MODULES (TO BE INITIALLY INSTALLED) 2. 2 FUTURE CATALYST MODULES 3. SCR HOUS!NG 3.1 SCR HOUSING #/INTERNAL INSULATIONS (INCLUDE SUPPORTS STRUCTURES FOR CATALYST MODULES & SCR HOUSING 3. 2 INLET & OUTLET TRANSITIONS W/INTERNAL INSULATIONS 3. 3 AIG SUPPORT DUCT \circ 3.4 SPACE FOR FUTURE CATALYST MODULES C 3. 5 HOIST & MONORAIL =/SUPPORT STRUCTURES 3. 6 INTERNAL PLANTFORM Y/LADDERS 0 3. 7 EXTERNAL PLATFORM FOR CATALYST LOADING HATCH 3. 8 ACCESS DOORS (2 SETS) 3.9 INSTRUMENT OR SAMPLING TAPS (10 SETS) 3. 16 SLIDE PLATES FOR FOUNDATION O 3.11 FOUNDATION SOLTS 3.12 THERMOCOULE (0 SETS) 3.13 DIFFERENTIAL PRESSURE INDICATOR (0 (ST32 3. 14 DRAINAGE (2 SEL2) 3. 15 EXPANSION JOINT : C 4. AMACHIA INJECTION GRID (AIG) 4.1 AIG PIPES WINJECTICH NOZZLES 5. AMMONIA ADJUSTMENT HEADER (2 SETS) S. 1 HEADER W/CONNECTING PIPES 5. 2 FLOW CONTROL DAMPERS (MANUAL) 5. 3 FLCW ORIFICES 5. 4 MANOMETERS */ISOLATION VALVES 5. 5 PRESSURE INDICATOR 15.5 TEMPERATURE INDICATOR 5. 7 THERYCCOUPLE 5.8 DRAIN YALVE 5. 9 INSULATION $^{\circ}$ 5. 10 SUPPORT LEGS

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M2.1	(E , IRM YE		BY	OUT OF
	RASE	ZOLTEC '	ZEZHTC	SCOPE
AGUEOUS AMMONIA FLOW CONTECL SKID (ELECTRIC AIR HEATER TYPE)				
E.: DILUTION AIR FANS W/MOTORS. FILTERS & SILENSERS	0	-	1	
(100% CAPACITY × 2 SETS)			·	
5.2 DILUTION AIR PIPING DAMPERS	<u></u>		 	
3. 3 DILUTION AIR FLOW ORIFICE & TRANSMITTER	<u> </u>	i	 	<u>!</u>
. 4 ELECTRIC AIR HEATER W/HEATER CONTROL PANEL	<u> </u>	·	<u>!</u>	
. 5 ALCHONIA VAPORIZER W/AIR ATOMIZING NOZZLE	<u> </u>	<u>!</u>		1
. 5 AQUEOUS ALMONIA PIPING & VALVES	<u> </u>	<u> </u>	<u>:</u>	
. 7 AQUEOUS ANGONIA FLOW ORIFICE & TRANSMITTER	C		, _	<u> </u>
S. 8 AQUEOUS AMMONIA FLOW CONTROL VALVE	C		<u> </u>	<u>i </u>
S. 9 AQUEOUS ANNONIA FLOW SHUT-OFF VALVE	C	<u> </u>	<u>!</u>	!
S. 10 AQUEOUS AMMONIA STRAINER	<u> </u>		<u> </u>	
5.11 ATOMIZING AIR PIPING & VALVES	Q	<u> </u>		1
. 12 ATCMIZING AIR, FLOW SHUT-OFF VALVE	0		<u> </u>	<u> </u>
.13 ATCMIZING AIR PRESSURE CONTROL VALVE		1	<u>-</u>	• • •
. 14 ATOMIZING AIR PRESSURE LOW SWITCH	0	T	<u> </u>	i
.15 ATOMIZING AIR FILTER	С	1		1
1. 15 INSTRUMENT AIR PIRING & VALVES	0			:
. 17 JUNCTION BOX	Õ		1	
S. 18 INSULATIONS	Č		!	
7,20 1,1000,17,210		:	i	i
				ì
		:	ı	1
AQUEOUS ANNONIA STORAGE PACILITY	_			
7. 1 AQUEOUS AMAIONTA STORAGE TANK (10,000 Gallon)		- C	1 -	1
7. 2 AQUEOUS AMONIA PUMP SKID		- C	<u> </u>	1
		1.	!	1
		i	!	
EXTERNAL PIPE				<u>i </u>
· · · · · · · · · · · · · · · · · · ·	<u>-</u>	1 0		
3.1 DILUTED NH3 PIPING WEXPANSION COINT (SKID - HEADER) 50 ft		C O	<u> </u>	<u> </u>
B. 1 DILUTED NH3 PIPING WEXPANSION TOINT (SKID - HEADER) 50 ft B. 2 SUPPORTS FOR DILCTED NH3 PIPING			0	. !
3.1 DILUTED NH3 PIPING #/EXPANSION TOINT (SKID - HEADER) 50ff 3.2 SUPPORTS FOR DILCTED NH3 PIPING 3.3 INSULATIONS FOR DILUTED NH3 PIPING				.1
B. 1 DILUTED NH3 PIPING W/EXPANSION FOINT (SKID - HEADER) 50ff B. 2 SUPPORTS FOR DILCTED NH3 PIPING B. 3 INSULATIONS FOR DILUTED NH3 PIPING B. 4 AMMONIA DISTRIBUTION PIPING W/EXPANSION JOINTS		0	0	
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EXTERNAL PIPE 8.1 DILUTED NH3 PIPING W/EXPANSION JOINT (SKID - HEADER) 50 ft 8.2 SUPPORTS FOR DILUTED NH3 PIPING 8.3 INSULATIONS FOR DILUTED NH3 PIPING 9.4 AMWONIA DISTRIBUTION PIPING W/EXPANSION JOINTS (HEADER - AIG) 8.5-SUPPORTS FOR AMMONIA DISTRIBUTION PIPING 8.6 INSULATIONS FOR AMMONIA DISTRIBUTION PIPING 8.7 AQUEOUS AMMONIA PIPING (PUMP - SXID) 8.8 SUPPORTS FOR AQUEOUS AMMONIA FIPING 9.1 MOTOR CONTROL CENTER 9.2 POYER SUPPLY OF ELECTRICAL EQUIPMENT		0 0	0	

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!TEM		WH1		OUT OF
	BASE	SPTION	OTHERS	. SCOPE
SCR INLET MCX/OZ ANALYZER	•			
D.: ANALYZER (NOIR TYPE)		$\overline{}$!	1
D. Z HEATED SAMPLING LINE (LENGTH: 80 FEST)	!	. 		
G. 2 CEM SYSTEM	.		C	:
			i;	ļ
			i	
SCR GUTLET MOX/NH3 AMALYZER	·		·	
1. 1 ANALYZER W/PROBE	<u>i</u>	:	<u>Ş</u>	:
1.2 HEATED SAMPLING LINE (LENGTH: FEET)	<u>'</u>		<u> </u>	1
L S CEN SYSTEM	·		: <u> </u>	1
		1 .		<u> </u>
SUBFACE PREPARATION (ACCORDING TO SSPC - SF6)				
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5. F!ELD WORK				
15.1 FOUNDATIONS		T	1 C	
15. 2 ERECTION			ŏ	1
15.3 SETTING CATALYST MODULES		i	1 0	: -
15. 4 START-UP SCR SYSTEM			1 5	
15. 5 PERFORMANCE TEST	-	·	1 8	
13.5 FIELD PAINT & TOUCH-UP PAINTING	·	+	- 0	
TO THE TANK A 1880M OF THE THAT		†		
6. SUPERVISORY SERVICE				
16. L ENECTICK		10	Τ	
16. 2 SETTING CATALYST MODULES	1	Τŏ	1	1
			1	
16.3 START-UP SCR SYSTEM		0	i	1

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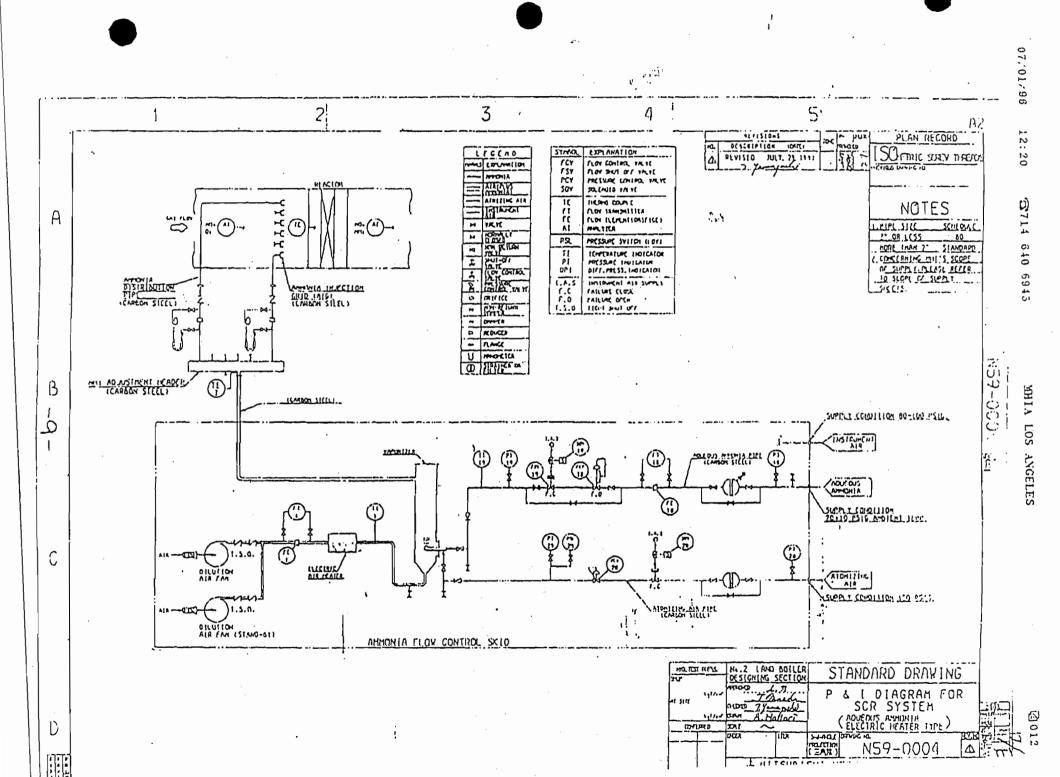
12:19

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- S 3 ATTACHMENT
 - 1. P & T DIAGRAM FOR SCR SYSTEM (DRIVARO CRADIATE)
 - 2. SUPPLEMENTARY P & I CHAGRAIA
- 3. GENERAL VIEW OF REACTER
- 4. SPECIFIED PERFORMANCE SHEET(S)
- 3. DATA SHEET(S)
- C 6. EXCEPITION & CLARIFICATION

WHIY FOR ANGELES

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BEST AVAILABLE COPY

Department of

Environmental Protection

Lawton Chiles Governor

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

Virginia B. Wetherell Secretary

January 8, 199'

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey J. Fassett Senior Plant Engineer DESTEC / Tiger Bay Limited Partnership 3219 State Road 630 West Fort Meade, Florida 33841

Re: FINAL Permit Amendment No. 1050223-003-AC (PSD-FL-190) Tiger Bay Cogen, Combined Cycle Unit

Dear Mr. Fassett:

The Department has reviewed DESTEC / Tiger Bay's October 23 letter requesting an amendment to its permit to extend the compliance date for achievement of the 15 parts per million nitrogen oxides (15 ppm NOx) emission limit. This request is acceptable and the permit is hereby amended as follows:

Specific Condition 15(a)

FROM: For this turbine, if the 15 (gas)/42 (oil) ppmvd, corrected to 15% O₂ emission rates cannot be met by

12/31/97, SCR or other control technology will be installed. Hence the permittee shall install a duct

module suitable for future installation of SCR equipment.

TO: • The NOx maximum emission limit of 97.2 pounds per hour (equivalent to 15 ppm @ 15% O₂) firing

gas/326 pounds per hour (equivalent to 42 ppm @ 15% O2) firing distillate fuel oil will be achieved not

later than 12/31/98 using appropriate combustion technology improvements or SCR.

Table 1, Footnote B

FROM: The NOx maximum limit will be lowered to 97.2 (lbs/hr) equivalent to 15 ppmvd @ 15% O₂ not later

than 12/31/97 using appropriate combustion technology improvements or SCR.

TO: The NOx maximum emission limit of 97.2 pounds per hour (equivalent to 15 ppm @ 15% O₂) will be

achieved not later than 12/31/98 using appropriate combustion technology improvements or SCR.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely

Howard L. Rhodes, Director

Division of Air Resources Management

HLR/aal/hh

Enclosures

"Protect, Conserve and Manage Florida's Environment and Natural Resources" Printed on recycled paper.

1253. Permit Book

1253. 2.2.5.1.1 1253.2.1.1.2.1.2

801-612 18

BEST AVAILABLE COPY

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF FINAL PERMIT AMENDMENT

In the Matter of an Application for Permit Amendment

Mr. Jeffrey M. Keenan DESTEC Energy, Inc. Post Office Box 4411 Houston, Texas 77210-4411 DEP File No. 1050223-003-AC PSD-FL-190

Enclosed is a letter that amends Permit Number PSD-FL-190. This letter amends Specific Condition No. 15(a) to extend the 15 ppm NOx compliance date from December 31, 1997 to December 31, 1998. This permit amendment is issued pursuant to Section 403, Florida Statutes.

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 14 (fourteen) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT AMENDMENT (including the FINAL permit amendment) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1-2-1 to the person(s) listed:

Mr. Jeffrey M.-Keenan, DESTEC *

Mr. Jeffrey J. Fassett, DESTEC *

Mr. Brian Beals, EPA

Mr. John Bunyak, NPS

Mr. Bill Thomas, SWD

Mr. Roy Harwood, Polk County

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk)

(Data)

FINAL DETERMINATION

DESTEC / Tiger Bay Cogen

Amendment of Permit No. 1050223-003-AC Tiger Bay Cogen Combined Cycle Unit

An Intent to Issue an air construction permit amendment for DESTEC / Tiger Bay Limited Partnership, Tiger Bay Cogen Combined Cycle Unit located five miles west of Ft. Meade, Polk County was distributed on November 21, 1996. The Notice of Intent was published in the The Ledger of Lakeland, Polk County on December 2, 1996. Comments were not submitted in response to the public notice. DESTEC recommended a clarification in Specific Condition No. 15(a) as to the final NO_x limits while firing distillate fuel oil. It is consistent with limit of 42 ppm given elsewhere in the permit.

The final action of the Department will be to issue the permit amendment as proposed, except with the clarification cited by DESTEC.

ATTACHMENT TB-EU3-B6 EMISSIONS UNIT COMMENT

FUGITIVE/DEMINIMIS/TRIVIAL ACTIVITIES LIST

Title V Permitting, Tiger Bay Limited Partnership, Ft. Meade, Florida

Area	Emission Unit Description	Type/ Pollutant	Status (a)
	Condenser Pumps (2)	Fugitive	TR
	Condenser	Vent	TR
CT Turbine Area	Lube Oil Reservoir (700 gal) (Mist Eliminator)	Vent/VOC	UR
	Turbine/Generator Fire System (CO2, 6 ton capacity)	Fugitive	ER
	Turbine Cooling Air	Vent	TR
	Various Pumps (sumps, condensate, etc.)	Fugitive	TR
	Miscellaneous Drains Tank	Vent	TR
	Generator H2/CO2 System	Fugitive	TR
	Hydraulic Equipment	Fugitive	TR
	Natural Gas Release Valve	Vent	TR
	Ammonia Unloading (aqueous)	Fugitive	UR
	Ammonia Tank (aqueous)	Vent	UR
	Ammonia Slip (vaporizors)	Fugitive	UR
HRSG	Natural Gas Release Valve	Vent	TR
	Various Steam Vents & Pressure Relief Valves	Vents	TR
	Turbine Wash System	Vent	TR
	HP Steam Vent	Vent	TR
	Blowdown Quench Tank	Vent	TR
	Various Pumps (feedwater, and chemical feed)	Fugitive	TR
Boiler Chemical Feed Skid	Conquor 3583 Tank I @ 2755 lb	Vent	TR
	Burolock HP 06 Tank I @ 3200 lb	Vent	TR
	Conquor 3475 Tank I @ 2790 lb	Vent	. TR

FUGITIVE/DEMINIMIS/TRIVIAL ACTIVITIES LIST

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Title V Permitting, Tiger Bay Limited Partnership, Ft. Meade, Florida

Area	Emission Unit Description	Type/ Pollutant	Status (a)
_	Boiler Feed Water Pumps (2)	Fugitive	TR
General Site	Brazing, Soldering or Welding	Fugitive	ER
	Plant Grounds Maintenance	Fugitive	TR
	Routine Maintenance	Fugitive	TR
	Oil/Water Separator	Fugitive	TR
	CEM Equipment & Calibration Gas Venting	Fugitive	TR
	Air Compressed System	Vent	TR ·
	Non-Halogenated Solvent	Fugitive	ER
	Portable Maintenance Equipment Diesel Engine	Stack	UR/ER
	Steam Line to customer(4 in Vent)	Vent	TR
	Lube Oil storage tank (9,500 gal)(TK-010)	Vent	UR
Substation	Transformers and Associated Equipment (5 transformers) (MT-001,MT-002, AT-001A & B, AT-003)	Fug./VOC	TR
Parking Lot	Vehicles	Exhausts	ER
	Vehicles	Fugitive	UR

⁽a) TR = Trivial (as provided by FDEP policy memorandum dated April 19, 1996 DARM-PER/V-15).

ER = Exempt by Rule 62-210.300(3)(a).

UR = Unregulated.