

## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

September 11, 1997

#### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. 3201 34th Street South St. Petersburg, Florida 33733

Re: FPC UF Cogen - AC01-204652/PSD-FL-181(A

Final Permit Amendment

Dear Mr. Pardue:

The Department has evaluated your request for an increase in the heat input to the combustion turbine for operation at ambient temperatures near 45°F and a corresponding increase in the short term NO<sub>x</sub> emission standard (lb/hr). Your request (page 8 of application) and subsequent information submitted on March 7, 1997 indicated that no increase in annual NO<sub>x</sub> emissions would occur as a result of this amendment. The Department hereby amends the above referenced permit Specific Conditions 2 and 3 as follows and clarifies that continuous monitors are to be used to quantify the contribution from the combined cycle combustion turbine and duct burner in order to demonstrate compliance with the annual emissions caps for NO<sub>x</sub>.

#### 2. Emissions from this facility shall not exceed the limits listed below:

Pollutant	Source	Fuel	Basis of Limit	lbs/hr	tons/yr
NOx	Turbine	Gas	EBM*: 25 ppmvd @ 15% O2	<del>35.0</del> <u>39.6</u>	142.7
	Turbine	Oil	EBM*: 42 ppmvd @ 15% O2	66.3	7.3
	D. Burner	Gas	EBM*: 0.1 lb/MMBtu	18.7	24.6
	Facility	Gas/Oil			194.3
$so_2$	Turbine	Oil	BACT: 0.5% Sulfur Max.		
	Boiler 4	Oil	BACT: 0.5% Sulfur Max.		
	Boiler 5	Oil	BACT: 0.5% Sulfur Max.		
VE	Turbine	Gas/Oil	Equivalent of mass EBM*	10%/20% c	pacity**
	D. Burner	Gas	11 11 11	10% opacit	y
	Boiler 4	Gas/Oil	11 11 11	10%/20% c	pacity**
	Boiler 5	Gas/Oil	u n	10%/20% c	pacity**
CO	Turbine	Gas	BACT: 42 ppmvd	38.8	158.0
	Turbine	Oil	EBA***: 75 ppmvd	70.5	7.7
•	D. Burner	Gas	BACT: 0.15 lb/MMBtu****	28.1	36.9

<sup>\*</sup> EBM: Established by manufacturer

<sup>\*\*</sup> Except for one 6-minute period per hour of not more than 27% opacity

<sup>\*\*\*</sup> EBA: Established by applicant

<sup>\*\*\*\*</sup> BACT limit proposed by applicant in Table A-2 of application

Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

**US Postal Service** 

Postage Certified Fee

Special Delivery Fee

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6. Signature: (Addressee or Agent)		-			-
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3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

		Natural Gas	No. 2 Fuel Oil				
	M ft3/hr*	MM ft3/yr	hrs/yr*	M-gal/hr*	<u>Mgal/yr</u>	hrs/yr*	
Turbine	<del>367.9</del> <u>420.3</u>	2997.2**	8146.8**	2.9	635.1	219.0**	
Duct Burner	197.7	519.5	2628.0	0	0	0	

- \*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.
- \*\*An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hrs/yr), in which case, the emissions limits in Specific Condition No. 2 shall be adjusted accordingly.

Boilers Nos. 4 and 5, firing natural gas or No. 2 fuel oil, may be operated as necessary for backup, as long as total  $NO_X$  emissions from the four sources emissions units within the permitted facility do not exceed 194.3 tons  $NO_X$  per year. The permittee shall maintain the required fuel use records to demonstrate compliance with this condition and include the total NOx emission calculation in each annual operating report. For purposes of demonstrating compliance with the annual limits the NOx emission rate (lbs/MMBtu) from the combustion turbine and duct burner shall be calculated using the  $NO_X$  analyzer data and equation F-6 from 40 CFR 75 Appendix F. Hourly heat input rates (MMBtu/hr) shall be used to convert lb/MMBtu of  $NO_X$  to lb/hour of  $NO_X$  and actual operating hours shall be used to obtain tons per year.

This permit amendment replaces the one issued on March 17, 1997. A copy of this permit amendment shall be filed with the referenced permit and shall become part of the permit. Any party to this order (permit amendment) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this permit amendment is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director Division of Air Resources

Management

Mr. W. Jeffrey Pardue Page 3 of 3 September 11, 1997

#### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this FINAL PERMIT

AMENDMENT was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 9-12-97 to the person(s) listed:

Mr. W. Jeffrey Pardue, FPC \*

Mr. Brian Beals, EPA

Mr. John Bunyak, NPS

Mr. Chris Kirts, NED

Dr. Pat Reynolds, DEP, Gainesville

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)

(Date)

# Florida Department of Environmental Protection

TO:

**Howard Rhodes** 

THROUGH:

Clair Fancy

THROUGH:

Al Linero Cile Line 9/13

FROM:

Martin Costello MC

DATE:

August 29, 1997

SUBJECT:

Florida Power Corporation University of Florida Cogen

Amendment of Permit No. AC01-204652 / PSD-FL-181(A)

Attached for your review and approval is a permit amendment which supersedes the previous amendment dated March 17, 1997 (attached) and clarifies how compliance is demonstrated for the annual NOx emissions cap. The permittee originally requested an increase in the fuel usage rate limit (from 367.9 to 420.3 thousand cubic feet of natural gas per hour) for the combustion turbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr). FPC requested a higher heat input limit to allow for higher output from the combustion turbine at temperatures near 45 °F. Although annual hours when ambient temperatures are near 45 °F are limited, the higher heat rates represents approximately a 14 percent increase in gas usage and NOx emission rates. The facility's annual emissions cap for NOx emissions will not increase.

I recommend your approval of this amendment.

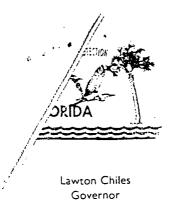
#### FINAL DETERMINATION

#### Florida Power Corporation

Amendment of Permit No. AC01-204652, PSD-FL-181(A)
University of Florida Cogen

An Intent to Issue an air construction permit amendment for Florida Power Corporation (FPC), University of Florida Cogen Plant located the campus at the University of Florida, Alachua County was distributed on February 23, 1996. The Notice of Intent was published in the Gainesville Sun March 20, 1996. Comments from within the Department resulted in a request for FPC to evaluate emission changes as a result of this action. The response from FPC (letter dated March 7, 1997) indicates that only minor increases in nitrogen oxide (NO<sub>X</sub>) emissions will occur as a result of this amendment and the emission cap for NO<sub>X</sub> will not be exceeded.

The final action of the Department will be to issue the permit amendment with an additional requirement to use the CEMS monitoring data to quantify  $NO_X$  emissions more accurately from the combustion turbine and duct burner.



# Department of Environmental Protection

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

March 17, 1997

Virginia B. Wetherell Secretary

#### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. 3201 34th Street South St. Petersburg, Florida 33733

Dear Mr. Pardue:

RE: FPC UF Cogen - AC01-204652/PSD-FL-181(A)
Request to Amend Permit

The Department has evaluated your request for an increase in the heat input to the combustion turbine for operation at ambient temperatures near 45°F and a corresponding increase in the short term  $\mathrm{NO}_{\mathrm{X}}$  emission standard (lb/hr). Your request (page 8 of application) and subsequent information submitted on March 7, 1997 indicated that no increase in annual  $\mathrm{NO}_{\mathrm{X}}$  emissions would occur as a result of this modification. The Department will monitor annual emission rates for a 5 year period to verify that emissions do not increase significantly as a result of this modification. The Department hereby amends the above referenced permit Specific Conditions 2 and 3 as follows:

#### 2. Emissions from this facility shall not exceed the limits listed below:

Pollu- tant	Source	Fuel	Basis of Limit	lbs/hr	tons/yr
NOx	Turbine	Gas	EBM*:25 ppmvd @ 15% 02	35-0 39.6	142.7
	Turbine	Oil	EBM*:42 ppmvd @ 15% O2	66.3	7.3
	D. Burner	Gas	EBM*:0.1 lb/MMBtu	18.7	24.6
	Facility	Gas/Oil	·		194.3
SO <sub>2</sub>	Turbine	Oil	BACT:0.5% Sulfur Max.		
-	Boiler 4	Oil	BACT:0.5% Sulfur Max.	~~~	
	Boiler 5	Oil	BACT:0.5% Sulfur Max.		
VE	Turbine G	as/Oil	Equivalent of mass EBM*	10%/20% opa	city**
	D. Burner G	as		10% opacity	<del>-</del>
	Boiler 4 G	as/Oil	и и и	10%/20% opa	city**
		as/Oil	81 88 PJ	10%/20% opa	city**
СО	Turbine	Gas	BACT: 42 ppmvd	38.8	158.0
	Turbine	Oil	EBA***:75 ppmvd	70.5	7.7
	D. Burner	Gas	BACT:0.15 lb/MMBtu****	28.1	36.9

\*EBM: Established by manufacturer

<sup>\*\*</sup>Except for one 6-minute period per hour of not more than 27% opacity

<sup>\*\*\*</sup>EBA: Established by applicant

<sup>\*\*\*\*</sup>BACT limit proposed by applicant in Table A-2 of application

Mr. W. Jeffrey Pardue Page Two March 17, 1997

3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

#### Natural Gas

#### No. 2 Fuel Oil

	M ft3/hr*	MM ft3/yr	hrs/yr*	M gal/hr*	M qal/yr hrs/yr*
Turbine	367-9 420.3		8146.8**	2.9	635.1 219.0**
Duct Burne	r 197.7	519.5	2628.0	0	0 0

\*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.

\*\*An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hrs/yr), in which case, the emissions limits in Specific Condition No. 2 shall be adjusted accordingly.

Boilers Nos. 4 and 5, firing natural gas or No. 2 fuel oil, may be operated as necessary for backup, as long as total  $NO_X$  emissions from the four sources. emissions units within the permitted facility do not exceed 194.3 tons  $NO_X$  per year. The permittee shall maintain the required fuel use records to demonstrate compliance with this condition and include the total  $NO_X$  emission calculation in each annual operating report. Beginning in 1997, the  $NO_X$  emission rate (lbs/MMBtu) from the combustion turbine and duct burner shall be calculated using the  $NO_X$  analyzer data and equation F-6 from 40 CFR 75 Appendix F. Hourly heat input rates (MMBtu/hr) shall be used to convert lb/MMBtu of  $NO_X$  to lb/hour of  $NO_X$ .

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit ACO1-204652/PSD-FL-181(A).

Sincerely,

Howard L. Rhodes, Director Division of Air Resources

Management

HLR/mc/t



August 28, 1997

RECEIVED

AUG 29 1997

BUREAU OF AIR REGULATION

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

Dear Ms. Carter:

RE: Florida Power Corporation, University of Florida Cogeneration Plant

REQUEST FOR EXTENSION OF TIME on Amendment to Permit No. AC01-204652, PSD-FL-181(A) and the Intent to Issue Title V Air Operation Permit, Draft Permit No. 1270028-

001-AV

On March 20, 1997, Florida Power Corporation (FPC) received the above-referenced air construction permit amendment. A review of the permit conditions has revealed that several issues remain to be resolved. Similar permit conditions have been written into the above-referenced Draft Title V permit. Therefore, resolution of both permitting actions is linked. The Department previously granted Orders under OGC Case Nos. 97-0618 (PSD permit) and 97-1208 (Title V permit), extending the time to file a petition until September 2, 1997 and August 29, 1997, respectively. Mr. Scott Osbourn of my staff has had discussions with Mr. Charles Logan of the Department and he has agreed that an extension of time for 14 days to discuss these issues is appropriate. Therefore, based upon the Department's concurrence and pursuant to Rules 62-103.050 and 28-106.111, Fla. Admin. Code, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing on both the PSD permit amendment and the draft Title V permit under Sections 120.569 and 120.57, Fla. Stat., up to and including September 12, 1997.

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC: M. Costello, BAR

cc:

Al Linero, DEP Scott Sheplak, DEP

## State of Florida DEPARTMENT OF ENVIRONMENTAL PROTECTION

## ROUTING AND TRANSMITTAL SLIP

То	(Name, Office, Location)
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## RECEIVED

AUG 26 1997

BUREAU OF AIR REGULATION

FROM:	DATE 8-25
Jeff Brown, OGC	PHONE 8-9730

### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION, UNIVERSITY OF FLORIDA COGEN,

Petitioner,

vs.

OGC CASE NO. 97-0618

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

## ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner FLORIDA POWER CORPORATION to grant an extension of time to file a petition for an administrative hearing on Application No. AC01-204652, PSD-FL-181(A). See Exhibit 1.

Although Counsel for Petitioner has not discussed this request with counsel for the Respondent State of Florida

Department of Environmental Protection, the Department has no objection to it. Therefore,

#### IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until September 2, 1997, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of

Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this  $\frac{\sqrt{25}}{25}$  day of August, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-9314

#### CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

Robert A. Manning, Esquire HOPPING, GREEN, SAMS & SMITH 123 South Calhoun Street Post Office Box 6526 Tallahassee, Florida 32314-6526

W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department FLORIDA POWER CORPORATION 3201 Thirty-fourth St. S. Post Office Box 14042 St. Petersburg, FL 33733

on this  $25^{4}$  day of August, 1997.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JEFFREY BROWN

Assistant General Counsel Florida Bar No. 0843430

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-9730

#### HOPPING GREEN SAMS & SMITH

PROFESSIONAL ASSOCIATION

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 425-3415

July 30, 1997

GARY K. HUNTER, JR.
JONATHAN T. JOHNSON
ROBERT A. MANNING
ANGELA R. MORRISON
GARY V. PERKO
KAREN M. PETERSON
R. SCOTT RUTH
W. STEVE SYKES
T. KENT WETHERELL, II

OF COUNSEL W. ROBERT FOKES



Dept. of Environmental Protection Office of General Counsel

Ms. Kathy Carter Office of General Counsel Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

Re: OGC Case No. 97-0618

Florida Power Corporation, University of Florida

Cogeneration Plant

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

Dear Ms. Carter:

JAMES 5. ALVES

BRIAN H. BIBEAU

RALPH A. DEMEO

THOMAS M. DEROSE

FRANK E. MATTHEWS

RICHARD D. MELSON

MICHAEL P. PETROVICH

WILLIAM H. GREEN

WADE L. HOPPING

DAVID L. POWELL
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
DOUGLAS S. ROBERTS
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

KATHLEEN BLIZZARD

ELIZABETH C. BOWMAN

RICHARD S. BRIGHTMAN

PETER C. CUNNINGHAM

Attached for filing is a Request for Extension of Time on the above-referenced permitting matter. The Department previously granted an Order under OGC Case No. 97-0618, dated June 27, 1997, extending the time to file a petition until July 30, 1997. Accordingly, the attached Request asks that the time to file a Petition for Administrative Hearing be extended for an additional 30 days until August 30, 1997.

Sincerely,

Robert A. Manning

Attorney for

Florida Power Corporation

RAM/pak Enclosure



July 29, 1997

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

Dear Ms. Carter:

RE: Florida Power Corporation, University of Florida Cogeneration Plant

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

On March 20, 1997, Florida Power Corporation (FPC) received the above-referenced permit amendment. A review of the permit conditions has revealed that several issues remain to be resolved. Mr. Scott Osbourn of my staff has had discussions with Messrs. Al Linero and Martin Costello of the Department and they have agreed that an extension of time for 30 days to discuss these issues is appropriate. Therefore, based upon the Department's concurrence and pursuant to Rules 62-103.050 and 28-106.111, Fla. Admin. Code, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing under Sections 120.569 and 120.57, Fla. Stat., up to and including August 30, 1997.

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

cc:

Al Linero, BARM Chris Kirts, NE District Charles Logan, DEP HOPPING GREEN SAMS & SMITH

PROFESSIONAL ASSOCIATION

ATTORNEYS AND COUNSELORS

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OF COUNSEL W. ROBERT FOKES

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BUREAU OF AIR REGULATION



Dept. of Environmental Protection Office of General Counsel

Ms. Kathy Carter Office of General Counsel Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

Re: OGC Case No. 97-0618

Florida Power Corporation, University of Florida

Cogeneration Plant

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

Dear Ms. Carter:

JAMES S. ALVES

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Sincerely.

Robert A. Manning

Attorney for

Florida Power Corporation

RAM/pak Enclosure

CC: M. Costello



July 29, 1997

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

Dear Ms. Carter:

RE: Florida Power Corporation, University of Florida Cogeneration Plant

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

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If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

cc:

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Chris Kirts, NE District Charles Logan, DEP

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION, UNIVERSITY OF FLORIDA COGEN,

Petitioner,

vs.

OGC CASE NO. 97-0618

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

## ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner FLORIDA POWER CORPORATION to grant an extension of time to file a petition for an administrative hearing on Application No. AC01-204652, PSD-FL-181(A). See Exhibit 1.

Although Counsel for Petitioner has not discussed this request with counsel for the Respondent State of Florida Department of Environmental Protection, the Department has no objection to it. Therefore,

#### IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until September 2, 1997, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of

Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 35 day of August, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-9314

#### CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

Robert A. Manning, Esquire HOPPING, GREEN, SAMS & SMITH 123 South Calhoun Street Post Office Box 6526 Tallahassee, Florida 32314-6526 W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department FLORIDA POWER CORPORATION 3201 Thirty-fourth St. S. Post Office Box 14042 St. Petersburg, FL 33733

on this  $25^{\frac{1}{12}}$  day of August, 1997.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JEFFRÉY BROWN

Assistant General Counsel Florida Bar No. 0843430

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-9730

#### HOPPING GREEN SAMS & SMITH

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OF COUNSEL W. ROBERT FOKES



Dept. of Environmental Protection Office of General Counsel

Ms. Kathy Carter Office of General Counsel Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

Re: OGC Case No. 97-0618

Florida Power Corporation, University of Florida

Cogeneration Plant

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

Dear Ms. Carter:

JAMES S. ALVES

BRIAN H. BIBEAU

RALPH A. DEMEO.

WILLIAM H. GREEN

WADE L. HOPPING

DAVID L. POWELL
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
DOUGLAS S. ROBERTS
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

THOMAS M. DEROSE

FRANK, E. MATTHEWS.

RICHARD D. MELSON MICHAEL P. PETROVICH

KATHLEEN BLIZZARD

ELIZABETH C. BOWMAN

RICHARD S. BRIGHTMAN :

PETER C. CUNNINGHAM

Attached for filing is a Request for Extension of Time on the above-referenced permitting matter. The Department previously granted an Order under OGC Case No. 97-0618, dated June 27, 1997, extending the time to file a petition until July 30, 1997. Accordingly, the attached Request asks that the time to file a Petition for Administrative Hearing be extended for an additional 30 days until August 30, 1997.

Sincerely,

Robert A. Manning

Attorney for

Florida Power Corporation

RAM/pak Enclosure



July 29, 1997

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

Dear Ms. Carter:

RE: Florida Power Corporation, University of Florida Cogeneration Plant

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

On March 20, 1997, Florida Power Corporation (FPC) received the above-referenced permit amendment. A review of the permit conditions has revealed that several issues remain to be resolved. Mr. Scott Osbourn of my staff has had discussions with Messrs. Al Linero and Martin Costello of the Department and they have agreed that an extension of time for 30 days to discuss these issues is appropriate. Therefore, based upon the Department's concurrence and pursuant to Rules 62-103.050 and 28-106.111, Fla. Admin. Code, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing under Sections 120.569 and 120.57, Fla. Stat., up to and including August 30, 1997.

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

cc:

Al Linero, BARM Chris Kirts, NE District Charles Logan, DEP Date: 6/20/97 3:17:37 PM From: Marjane Monahan TAL

Subject: Florida Power Corp. Univ. of Fla. Cogen

Re: Florida Power Corporation, University of Florida Cogen Amendment to Permit No. ACO1-204652, PSD-FL-181(A) OGC Case No. 97-0963

On May 30, 1997, OGC received a request for extension of time until July 30, 1997 to file a petition regarding the above referenced matter. Jeffrey Brown is the OGC attorney assigned to handle the case.

Please send a copy of the copy of the permit amendment. Also, please let me know if this was timely. Was there an Intent to Issue that was published? If so, when? If not, did they receive the permit amendment by certified mail?

Thanks.



RECEIVED JUN 02 1997 BUREAU OF AIR REGULATION

May 28, 1997

Ms. Kathy Carter, Esq. Office of General Counsel Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, FL 32399-2400

Dear Ms. Carter:

Re: Florida Power Corporation, University of Florida Cogen

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

On March 20, 1997, Florida Power Corporation (FPC) received the above-referenced permit amendment. A review of the permit conditions has revealed that several issues remain to be resolved. Mr. Scott Osbourn of my staff has had discussions with Mr. Al Linero of the Department and he has agreed that an extension of time to discuss these issues is appropriate. Therefore, based upon Mr. Linero's concurrence and pursuant to Section 62-103.050, FAC, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing under Sections 120.569 and 120.57 FS, up to and including July 30, 1997

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

James S. Alves, Esq.

Hopping, Green, Sams and Smith

CC:

Al Linero, BARM

Chris Kirts, NE District

CC: A. UnerO M. Costello BAR T. Hewar

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

## RECEIVED

MAY 23 1997

FLORIDA POWER CORPORATION,
UNIVERSITY OF FLORIDA COGEN,
BUREAU OF
AIR REGULATION

Petitioner,

Vs.

OGC CASE NO. 97-0618

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

## ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner FLORIDA POWER CORPORATION to grant an extension of time to file a petition for an administrative hearing on Application No. AC01-204652, PSD-FL-181(A). See Exhibit 1.

Although Counsel for Petitioner has not discussed this request with counsel for the Respondent State of Florida Department of Environmental Protection, the Department has no objection to it. Therefore,

#### IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until May 30, 1997, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental

--ATTENTION MAIL ROOM--

PLEASE ROUTE THIS DOCUMENT TO:

Al Linero DARM
Name of Individual/Office

Mail Station Number

Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 3 day of May, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-9314

#### CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

James S. Alves, Esquire HOPPING, GREEN, SAMS & SMITH 123 South Calhoun Street Post Office Box 6526 Tallahassee, Florida 32314-6526 W. Jeffrey Pardue, C.E.P. Director, Environmental Services Department FLORIDA POWER CORPORATION 3201 Thirty-fourth St. S. Post Office Box 14042 St. Petersburg, FL 33733

on this  $\frac{2}{2}$  day of May, 1997.

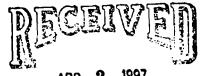
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JEFFREY BROWN

Assistant General Counsel Florida Bar No. 0843430

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-9730





Dept. of Environmental Protection Office of General Counsel

April 1, 1997

Ms. Kathy Carter, Esq. Office of General Counsel Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Ms. Carter:

Re: Florida Power Corporation, University of Florida Cogen

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

On March 20, 1997, Florida Power Corporation (FPC) received the above-referenced permit amendment. A review of the permit conditions has revealed that several issues remain to be resolved. Mr. Scott Osbourn of my staff has had discussions with Mr. Al Linero of the Department and he has agreed that an extension of time to discuss these issues is appropriate. Therefore, based upon Mr. Linero's concurrence and pursuant to Section 62-103.050, FAC, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing under Sections 120.569 and 120.57 FS, up to and including May 20, 1997.

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

ames S. Alves, Esq.

Hopping, Green, Sams and Smith

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

. cc:

Al Linero, BARM

Chris Kirts, NE District



April 1, 1997

Ms. Kathy Carter, Esq.
Office of General Counsel
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Ms. Carter:

Re: Florida Power Corporation, University of Florida Cogen

Amendment to Permit No. AC01-204652, PSD-FL-181(A)

On March 20, 1997, Florida Power Corporation (FPC) received the above-referenced permit amendment. A review of the permit conditions has revealed that several issues remain to be resolved. Mr. Scott Osbourn of my staff has had discussions with Mr. Al Linero of the Department and he has agreed that an extension of time to discuss these issues is appropriate. Therefore, based upon Mr. Linero's concurrence and pursuant to Section 62-103.050, FAC, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing under Sections 120.569 and 120.57 FS, up to and including May 20, 1997.

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely.

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

cc:

Al Linero, BARM

Chris Kirts, NE District

CC: M. Costello, BAR

ames S. Alves, Esq. Hopping, Green, Sams and Smith

RECEIVED

APR 04 1997

BUREAU OF AIR REGULATION



# Department of Environmental Protection

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

March 17, 1997

Virginia B. Wetherell Secretary

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. 3201 34th Street South St. Petersburg, Florida 33733

Dear Mr. Pardue:

RE: FPC UF Cogen - ACO1-204652/PSD-FL-181(A)
Request to Amend Permit

The Department has evaluated your request for an increase in the heat input to the combustion turbine for operation at ambient temperatures near 45°F and a corresponding increase in the short term  $NO_X$  emission standard (lb/hr). Your request (page 8 of application) and subsequent information submitted on March 7, 1997 indicated that no increase in annual  $NO_X$  emissions would occur as a result of this modification. The Department will monitor annual emission rates for a 5 year period to verify that emissions do not increase significantly as a result of this modification. The Department hereby amends the above referenced permit Specific Conditions 2 and 3 as follows:

2. Emissions from this facility shall not exceed the limits listed below:

tons/yr
39.6 142.7
7.3
24.6
194.3
O% opacity**
pacity
% opacity**
% opacity**
158.0
7.7
36.9

<sup>\*</sup>EBM: Established by manufacturer

<sup>\*\*</sup>Except for one 6-minute period per hour of not more than 27% opacity

<sup>\*\*\*</sup>EBA: Established by applicant

<sup>\*\*\*\*</sup>BACT limit proposed by applicant in Table A-2 of application

Mr. W. Jeffrey Pardue Page Two March 17, 1997

3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

#### Natural Gas

#### No. 2 Fuel Oil

	<u> </u>	MM ft3/yr	hrs/yr*	M qal/hr*	M qal/yr hrs/yr*
Turbine	367-9 420.3	2997.2**	8146.8**	2.9	635.1 219.0**
Duct Burne	r 197.7	519.5	2628.0	0	0 0

\*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.

\*\*An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hrs/yr), in which case, the emissions limits in Specific Condition No. 2 shall be adjusted accordingly.

Boilers Nos. 4 and 5, firing natural gas or No. 2 fuel oil, may be operated as necessary for backup, as long as total  $NO_X$  emissions from the four sources emissions units within the permitted facility do not exceed 194.3 tons  $NO_X$  per year. The permittee shall maintain the required fuel use records to demonstrate compliance with this condition and include the total  $NO_X$  emission calculation in each annual operating report. Beginning in 1997, the  $NO_X$  emission rate (lbs/MMBtu) from the combustion turbine and duct burner shall be calculated using the  $NO_X$  analyzer data and equation F-6 from 40 CFR 75 Appendix F. Hourly heat input rates (MMBtu/hr) shall be used to convert lb/MMBtu of  $NO_X$  to lb/hour of  $NO_X$ .

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit ACO1-204652/PSD-FL-181(A).

Sincerely,

Howard L. Rhodes, Director Division of Air Resources

Management

HLR/mc/t

# Florida Department of Environmental Protection

TO:

Howard L. Rhodes

THRU:

Clair Fancy

**FROM** 

Al Linero (RO) 3/14

DATE:

March 14, 1997

SUBJECT:

FPC UF Cogen AC01-204652, PSD-FL-181(A)

FINAL Permit Amendment

Attached for approval and signature is a letter that will amend construction permit number AC01-204652, PSD-FL-181(A). This amendment increases the maximum heat input to the combustion turbine with a corresponding increase in the mass emission standard (lb/hr) for NO<sub>X</sub> without increasing the annual facility cap (tpy). This change was requested based on manufacturers curves and operational data which indicated that at 45° F the heat input achievable was higher than originally projected for this unit in the application to construct. The applicant took restrictions to net out of PSD for NO<sub>X</sub> (net emissions increase was 39.6 tpy) in 1992 when the combustion turbine was added to the facility. This action requires more accurate monitoring of annual NO<sub>X</sub> emissions, using the CEMS required under Title IV rather than the predictive equations used in the past, to ensure that the synthetic minor status is maintained following this modification.

The applicant has provided data which shows that annual  $NO_X$  emissions will not increase significantly as a result of this change.

I recommend your approval and signature. If you have any questions, Marty Costello or I will be glad to discuss the details.

AAL/mc

### P 265 659 135

	Receipt for Cer No Insurance Coverage Do not use for Internatio  Sirgery Number  Post Office, State) & ZIP Coo	Provided.  nal Mail (See reverse)  your Copo
	Postage	\$
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	Special Delivery Fee	
10	Restricted Delivery Fee	_
199	Return Receipt Showing to Whom & Date Delivered	
April	Return Receipt Showing to Whom, Date, & Addressee's Address	
800	TOTAL Postage & Fees	\$
_	Postmark or Date  ACDI-204652  PSD-F1-181(A)	3-18-97

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on the reverse side?	SENDER:  Complete items 1.  Complete items 3.  Print your name and a unit the reverse of this form so that we card to you.  Attach this form to the from of the mailpiece, or on the back if space permit.  Write 'Return Receipt Requested' on the mailpiece below the article.  The Return Receipt will show to whom the article was delivered and delivered.	e does not e number. d the date	1.  Addres 2.  Restric	see's Address ted Delivery	celpt Service.
N ADDRESS completed	3. Article Addressed to: M. W. Shey Pardue Dir. Environmental Serv. Dept. Ha. Power Corp. 3201 34th St. South St. Petersburg. H. 33711	4a. Article No. 4b. Service 1  Registere Express I  Return Rec	LS 65 Type ed Mail ceipt for Merchandis	9 135  Certified Insured See COD	ou for using Return Rec
Is your RETUR	5. Received By: (Print Name)  6. Signature: (Addressee or Agent)  PS Form 3811, December 1994	And fee is			Thank y

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

In the Matter of an Application for Permit Amendment

Mr. W. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. 3201 34th Street South St. Petersburg, Florida 33711 DEP File No. AC01-204652 PSD-FL-181(A)

Enclosed is a letter that amends previously-issued Permit Number AC01-204652 (PSD-FL-181) Specific Condition Nos. 2 and 3 allowing for an increase in the heat input to the combustion turbine. 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 30 (thirty) 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 3-18-97 to the person(s) listed:

Mr. W. Jeffrey Pardue, FPC \*

Mr. Chris Kirts, NED

Mr. Brian Beals, EPA

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)

3-18-47

(Date)

#### FINAL DETERMINATION

#### Florida Power Corporation

Amendment of Permit No. AC01-204652, PSD-FL-181(A)
University of Florida Cogen

An Intent to Issue an air construction permit amendment for Florida Power Corporation (FPC), University of Florida Cogen Plant located the campus at the University of Florida, Alachua County was distributed on February 23, 1996. The Notice of Intent was published in the Gainesville Sun March 20, 1996. Comments from within the Department resulted in a request for FPC to evaluate emission changes as a result of this action. The response from FPC (letter dated March 7, 1997) indicates that only minor increases in nitrogen oxide (NO<sub>X</sub>) emissions will occur as a result of this amendment and the emission cap for NO<sub>X</sub> will not be exceeded.

The final action of the Department will be to issue the permit amendment with an additional requirement to use the CEMS monitoring data to quantify NO<sub>X</sub> emissions more accurately from the combustion turbine and duct burner.



## Department of Environmental Protection

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

March 17, 1997

Virginia B. Wetherell Secretary

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. 3201 34th Street South St. Petersburg, Florida 33733

Dear Mr. Pardue:

RE: FPC UF Cogen - AC01-204652/PSD-FL-181(A)
Request to Amend Permit

The Department has evaluated your request for an increase in the heat input to the combustion turbine for operation at ambient temperatures near  $45\,^{\circ}\text{F}$  and a corresponding increase in the short term  $\text{NO}_{\text{X}}$  emission standard (lb/hr). Your request (page 8 of application) and subsequent information submitted on March 7, 1997 indicated that no increase in annual  $\text{NO}_{\text{X}}$  emissions would occur as a result of this modification. The Department will monitor annual emission rates for a 5 year period to verify that emissions do not increase significantly as a result of this modification. The Department hereby amends the above referenced permit Specific Conditions 2 and 3 as follows:

#### 2. Emissions from this facility shall not exceed the limits listed below:

Pollu- tant	Source	Fuel	Basis of Limit	lbs/hr	tons/yr
NOx	Turbine	Gas	EBM*:25 ppmvd @ 15% O2	<del>35-0</del> <u>39.6</u>	142.7
	Turbine	Oil	EBM*:42 ppmvd @ 15% O2	66.3	7.3
	D. Burner	Gas	EBM*:0.1 lb/MMBtu	18.7	24.6
	Facility	Gas/Oil			194.3
so <sub>2</sub>	Turbine	Oil	BACT:0.5% Sulfur Max.		
	Boiler 4	Oil	BACT:0.5% Sulfur Max.		
	Boiler 5	Oil	BACT:0.5% Sulfur Max.		
VE	Turbine G	as/Oil	Equivalent of mass EBM*	. 10%/20% opa	city**
	D. Burner G	as	н н н	10% opacity	, -
	Boiler 4 G	as/Oil	11 11	10%/20% opa	city**
	Boiler 5 G	as/Oil	11 11 11	10%/20% opa	city**
со	Turbine	Gas	BACT: 42 ppmvd	38.8	158.0
	Turbine	Oil	EBA***:75 ppmvd	70.5	7.7
	D. Burner	Gas	BACT:0.15 lb/MMBtu****	28.1	36.9

<sup>\*</sup>EBM: Established by manufacturer

<sup>\*\*</sup>Except for one 6-minute period per hour of not more than 27% opacity

<sup>\*\*\*</sup>EBA: Established by applicant

<sup>\*\*\*\*</sup>BACT limit proposed by applicant in Table A-2 of application

Mr. W. Jeffrey Pardue Page Two March 17, 1997

3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

#### Natural Gas

#### No. 2 Fuel Oil

	M ft	3/hr*	MM ft3/yr	hrs/yr*	M gal/hr*	M qal/yr hrs/yr	*
Turbine	367-9	420.3	2997.2**	8146.8**	2.9	635.1 219.0**	
Duct Burner	r	197.7	519.5	2628.0	0	0 0	

\*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.

\*\*An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hrs/yr), in which case, the emissions limits in Specific Condition No. 2 shall be adjusted accordingly.

Boilers Nos. 4 and 5, firing natural gas or No. 2 fuel oil, may be operated as necessary for backup, as long as total  $NO_X$  emissions from the four sources emissions units within the permitted facility do not exceed 194.3 tons  $NO_X$  per year. The permittee shall maintain the required fuel use records to demonstrate compliance with this condition and include the total  $NO_X$  emission calculation in each annual operating report. Beginning in 1997, the  $NO_X$  emission rate (lbs/MMBtu) from the combustion turbine and duct burner shall be calculated using the  $NO_X$  analyzer data and equation F-6 from 40 CFR 75 Appendix F. Hourly heat input rates (MMBtu/hr) shall be used to convert lb/MMBtu of  $NO_X$  to lb/hour of  $NO_X$ .

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit ACO1-204652/PSD-FL-181(A).

Sincerely,

Howard L/ Rhodes, Director Division of Air Resources

Management

HLR/mc/t



## RECEIVED

MAR 12 1997

BUREAU OF AIR REGULATION

March 7, 1997

Mr. Martin Costello Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Costello:

Re: FPC University of Florida Cogeneration Facility

AC01-204652/PSD-FL-181(A)

As you recall, Florida Power Corporation (FPC) had requested an increase in the heat input to the cornbustion turbine for operation at inlet temperatures near  $45^{\circ}F$  and a corresponding increase in the short-term  $NO_x$  emission standard (lb/hr). This letter serves to provide additional information to the Department for the period of time that has elapsed since the Department authorized an increase in the short-term  $NO_x$  emission rate (approximately the fourth quarter of 1995 to the present).

Specifically, the Department requested that FPC review emissions data generated from approximately the fourth quarter of 1995 to the fourth quarter of 1996 to determine the frequency and magnitude of  $NO_x$  emissions in excess of the previous 35.0 lb/hr limit since the requested increase to a 39.6 lb/hr limit. A review of all of the daily logs during this time period indicated 17 hours of data in excess of 35.0 lb/hr. The incremental difference in emissions (i.e., above 35.0 lb/hr) is approximately 46.6 total pounds. A summary of these hourly periods is provided as an attachment.

If you should have any questions concerning the above, please do not hesitate to contact me at (813) 866-5158.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

Attachment

# UF Cogen NO<sub>x</sub> Emissions in Excess of 35.0 lb/hr for the Period of the 4th Q'95 to the 4th Q'96

	=14.00.0101.0
DATE	NOx EMISSIONS
	(lb/hr)
12/10/95	35.1
12/11/95	35.2
12/12/95	35.1
12/12/95	35.1
1/8/96	46.7
1/8/96	44.5
1/10/96	35.6
1/10/96	35.1
2/5/96	35.6
2/6/96	35.9
3/10/96	35.2
3/10/96	35.3
3/10/96	35.3
3/10/96	35.3
3/10/96	35.4
8/19/96	36.5
10/27/96	55.7



April 3, 1996

RECEIVED

APR 05 1996

AIR REGULATION

Mr. Al Linero, P.E.
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Linero:

Re:

Request to Amend Permit at FPC's UF Cogen Plant

DEP Permit No. AC01-204652; PSD-FL-181(A)

Enclosed please find the notarized proof of publication received from the Gainesville Sun for the Florida Department of Environmental Protection *Notice* of *Intent* to *Issue Permit* referenced to the above request. The notice was published on March 20, 1996.

It is our understanding that a final permit could be issued by the Department as early as next week, assuming no adverse comments were received.

If you should have any questions concerning this correspondence, please do not hesitate to contact me at (813) 866-5158.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

CC:

Ernest Frey, DEP NE District Martin Costello, DEP DARM Patricia Reynolds, GBO

Attachment

STATE OF FLORIDA
DEDARTMENT OF
ENVIRONMENTAL
PROTECTION
NOTICE OF INTENT
TO ISSUE PERMIT
AC01-204652/PSD-FL-181(A)

The Department of Informmental Protect of Department of Section (Department) gives ringe of its intention its save an amended permit to Florida Power Corp. (FPC), P.O. Box 14042, St. Petersburg, FL 33733 to increase the fuel usage rate limit (from 367.9 to 420.3 thousand qubic feet of natural gas per hour) for the combustion furbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr) at FPC's facility located on the campus of the University of Florida on Mowry Road in Alachua County. This action was requested to accommodate operation at ambient conditions (45°F) which allow for higher operation rates for this unit equipped with an evaporative cooler on the indet to the turbine. The facility's annual emissions cap for NOx emissions will not increase.

A person whose substantial

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57. Florida Statutes (F.S.). The petition must contain the information set forth

Νō 11266

THE GAINESVILLE SUN Published Daily and Sunday

GAINESVILLE: FLORIDA

rida Power Corp.(FPC), P.O.	CHOA			G/III TES VILLE	, , , , ,
x 14042, St. Petersburg, FC 733 to increase the fuel usage e limit (from 367.9 to 420.3 busand gubic feet of natural	Jersigned authority	personally appear	edNaomi W	illiams-Jor	dan
n turbine with a correspond- increase in the short term by emission standard (from 0 to 39.6 lb/hr) at FPC's facil- located on the campus of the		sistant Cla	ssified Mg	r of THE GAINES	VILLE SUN, a daily
niversity of Florida on Mowry oad in Alachua County. This ition was requested to accom- odate operation at ambient	d at Gainesville in				
onditions (45°F) which allow r higher operation rates for his unit equipped with an eaporative cooler on the inlet	Notice.	of Intent.			
nnual emissions cap for NOX missions will not increase.				•••••	
A person whose substantial sterests are affected by the epartment's proposed permit ng decision may petition to n administrative proceeding	March 2			ed in said newspap	
n administrative phearing) in accordance with lection 120.57, Florida Statute F.S.). The petition must con ain the information set fort เช่ารายเรานอ" LOUNITY, 1	s   h vs that the said 1	HE GAINESVILLE	SUN is a newspap	per published at C	Gainesville, in said
Alachua County e	ach day, and has be	en entered as sed	wild class mail matt	er at the nost offic	e in Gainesville, in
said Alachua Coun of advertisement; any discount for pu	and affiant further sublication in the said	newspaper.	Well 8 188	nised any person, fi	rm or corporation
			#CC 357902		
Sworn to and subso	cribed before me th	is Ay	of Fain-Insulance of The Control of	11:5 M	
day of	CUAD 1995	)   """	One	Joh Alian	1- Soslan.

Notary Public



# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

February 23, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. P.O. Box 14042 St. Petersburg, FL 33733

Dear Mr. Pardue:

RE: FPC UF Cogen

AC01-204652/PSD-FL-181(A) Request to Amend Permit

Attached is one copy of the proposed amendment to the construction permit, Intent to Issue, and Notice of Intent to Issue (for publication by the applicant) for the above referenced emission unit.

Please submit any comments you may have concerning the Department's proposed action to Mr. A. A. Linero, P.E., at the above address. If you have any questions, please call Mr. Martin Costello or Mr. Linero at (904) 488-1344.

Sincerely,

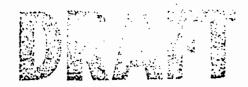
C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/mc/t

cc: Ernest Frey, NED Jewell Harper, EPA



February XX, 1996

#### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Jeffrey Pardue, Director Environmental Service Department Florida Power Corp. P.O. Box 14042 St. Petersburg, FL 33733

Dear Mr. Pardue:

RE: FPC UF Cogen

AC01-204652/PSD-FL-181(A) Request to Amend Permit

The Department has evaluated your request for an increase in the heat input to the combustion turbine for operation at ambient temperatures near 45 F and a corresponding increase in the short term  $NO_X$  emission standard (lb/hr). Your request indicated that no increase in annual NOx emissions would occur as a result of this change (application page 8). The Department hereby amends the above referenced permit Specific Conditions 2 and 3 as follows:

### 2. Emissions from this facility shall not exceed the limits listed below:

Pollu- tant	Source	Fuel	Basis of Limit	lbs/hr	tons/yr
NOx	Turbine	Gas	EBM*:25 ppmvd @ 15% O2	35÷0 <u>39</u>	<u>.6</u> 142.7
	Turbine	Oil	EBM*:42 ppmvd @ 15% O2	66.3	7.3
	D. Burner	Gas	EBM*:0.1 lb/MMBtu	18.7	24.6
so <sub>2</sub>	Turbine	Oil	BACT:0.5% Sulfur Max.		
_	Boiler 4	Oil	BACT: 0.5% Sulfur Max.		
	Boiler 5	Oil	BACT:0.5% Sulfur Max.		
VE	Turbine (	Gas/Oil	Equivalent of mass EBM*	10%/20%	opacity**
	D. Burner	Gas	м и и	10% opa	city**
	Boiler4 (	Gas/Oil	н н	10%/20%	opacity**
	Boiler 5 (	Gas/Oil	11 11 11	10%/20	%opacity**
со	Turbine	Gas	BACT: 42 ppmvd	38.8	158.0
	Turbine	Oil	EBA***:75 ppmvd	70.5	7.7
	D. Burner	Gas	BACT:0.15 lb/MMBtu***	28.1	36.9

<sup>\*</sup>EBM: Established by manufacturer

<sup>\*\*</sup>Except for one 6-minute period per hour of not more than 27% opacity

<sup>\*\*\*</sup>EBA: Established by applicant

<sup>\*\*\*\*</sup>BACT limit proposed by applicant in Table A-2 of application

3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

#### Natural Gas

#### No. 2 Fuel Oil

	M ft3/hr*	MM ft3/yr	hrs/yr*	M qal/hr*	M gal/yr hrs/yr*
Turbine	367÷9 420.3	2997.2**	8146.8**	2.9	635.1 219.0**
Duct Burne	r 197.7	519.5	2628.0	0	0 0

\*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.

\*\*An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hrs/yr), in which case, the emissions limits in Specific Condition No. 2 shall be adjusted accordingly.

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit AC01-204652/PSD-FL-181(A).

Sincerely,

Howard L. Rhodes, Director Division of Air Resources Management

#### CERTIFICATE OF SERVICE

The	und	dersi	igned	duly	desig	gnat	ed depu	ty c	clerk	here	≥by	certifi	es	that
this	PI	ERMII	' AMEN	IDMEÑ	T and	all	copies	wer	e mai	iled	by	certifi	ed	mail
befo	re	the	close	of	busine	ess	on			to t	he	listed	per	sons

Clerk Stamp
FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

Clerk	Date

Copies to be furnished to:

Ernest Frey, NED Jewell Harper, EPA

#### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### CERTIFIED MAIL

In the Matter of an Application for Permit Amendment DEP File No. AC01-204652 Florida Power Corp. P.O. Box 14042 St. Petersburg, FL 33733 Alachua County

PSD-FL-181(A)

#### INTENT TO ISSUE

The Department of Environmental Protection (Department) gives notice of its intent to issue a amendment to the above referenced permit for the proposed changes detailed in the application specified above, for the reasons stated below.

The applicant, Florida Power Corp., applied to the Department of Environmental Protection to amend the air construction permit to provide an increase in the fuel usage rate limit (from 367.9 to 420.3 thousand cubic feet of natural gas per hour) for the combustion turbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr). This action was requested to accommodate operation at ambient conditions (45°F) which allows for higher operation rates for this unit equipped with an evaporative cooler on the inlet to the turbine. The facility's annual emissions cap for NOx emissions will not increase. This facility is located on the campus of the University of Florida, Alachua County, Florida.

Department has permitting jurisdiction under provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that the previous construction permit has expired and that a new permit with the approved amendments is required for the proposed changes.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

California de la California de California de

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 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 at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as

a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399 904-488-1344

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE PERMIT all copies were mailed by certified mail before the close of business on 2-37-96 to the listed persons.

Clerk Stamp
FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

rk Da

Copies furnished to: Ernest Frey, NED
Jewell Harper, EPA

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF INTENT TO ISSUE PERMIT AC01-204652/PSD-FL-181(A)

The Department of Environmental Protection (Department) gives notice of its intent to issue an amended permit to Florida Power Corp. (FPC), P.O. Box 14042, St. Petersburg, FL 33733 to increase the fuel usage rate limit (from 367.9 to 420.3 thousand cubic feet of natural gas per hour) for the combustion turbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr) at FPC's facility located on the campus of the University of Florida on Mowry Road in Alachua County. This action was requested to accommodate operation at ambient conditions (45°F) which allow for higher operation rates for this unit equipped with an evaporative cooler on the inlet to the turbine. The facility's annual emissions cap for NOx emissions will not increase.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (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 at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/ request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32301

Department of Environmental Protection Northeast District 7825 Baymeadows Way, Suite 200B Jacksonville, Florida 32256-7577

Department of Environmental Protection Gainesville Branch Office 5700 S.W. 34th Street, Suite 1204 Gainesville, Florida 32608

Any person may send written comments on the proposed action to Administrator, New Source Review at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

### Environmental Protection

TO:

C. H. Fancy

THROUGH: A. A. Linero

FROM:

Martin Costello 'M'

DATE:

February 22 1996

SUB:

FPC UF Cogen

AC01-204652/PSD-FL-181(A) Request to Amend Permit

Attached for your review and approval is a permit amendment which amends the above referenced construction permit to provide an increase in the fuel usage rate limit (from 367.9 to 420.3 thousand cubic feet of natural gas per hour) for the combustion turbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr). This represents approximately a 14 percent increase in gas usage and NOx emission rate. This change was requested based on manufacturers curves and operational data which indicated that at ambient conditions near 45 F the heat input achievable from the CT was higher than originally projected for this unit in the application to construct. The facility's annual emissions cap for NOx emissions will not increase.

If you have any questions, I will be glad to discuss the details.

AAL/mc/t



ACCOUNTS PAYABLE DEPT. B3F

P. O. BOX 14042

ST. PETERSBURG, FL 33733-4042 REMITTANCE ADVICE

(813) 866-5257

89

CHECK DATE	03/ <u>03/95</u> <b>v</b>	ENDOR FLA DE	PT OF ENVIRO	NMENTAL VENDO	R NO. 278473	CHECK NO. 1715821
INVOICE NO.	DATE	OUR ORDER NO.	VOUCHER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
CK96617	02/24/95		9503184809	250.00	.00 TOTAL	250.00 250.00

THE ATTACHED REMITTANCE IS IN FULL SETTLEMENT OF ACCOUNT AS STATED. IF NOT CORRECT PLEASE RETURN TO ABOVE ADDRESS.

Accounts Payable Department B3F P.O. Box 14042 St. Petersburg, FI 33733-4042



DATE 03/03/95 C

HECK NO.

PAY:

\$250\*DOLLARS AND 00 CENTS

\$\*\*\*\*\*250.00

83-11

SunBank / Mid-Florida

TO
THE
ORDER

FLA DEPT OF ENVIRONMENTAL PROTECTION 111 S MAGNOLIA ST SUITE 29 TALLAHASSEE FL 32399-2400 Void after 80 days

Phyma

# Department of Environmental Protection



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

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

This section of the Application for Air Permit form provides general information on the scope of this application, the purpose for which this application is being submitted, and the nature of any construction or modification activities proposed as a part of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department on diskette, this section of the Application for Air Permit must also be submitted in hard-copy.

#### **Identification of Facility Addressed in This Application**

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility name, if any; and a brief reference to the facility's physical location. If known, also enter the ARMS or AIRS facility identification number. This information is intended to give a quick reference, on the first page of the application form, to the facility addressed in this application. Elsewhere in the form, numbered data fields are provided for entry of the facility data in computer-input format.

Florida Power Corporation; University of Florida Cogeneration Project; Gainesville, Alachua County

#### **Application Processing Information (DEP Use)**

1.	Date of Receipt of Application:	
2.	Permit Number:	
3.	PSD Number (if applicable):	
4.	Siting Number (if applicable):	

Effective: 11-23-94

#### Owner/Authorized Representative or Responsible Official

- Name and Title of Owner/Authorized Representative or Responsible Official:
   W. Jeffrey Pardue, Director, Environmental Services Department
- 2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: 3201 34th Street South (P.O. Box 14042, Zip 33733)

City: St. Petersburg

State: FL

Zip Code: 33711

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

Telephone: (813)866-5151

Fax: (813)866-4926

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative\* of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, 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. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application 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. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. I 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.

Signature

Effective: 11-23-94

<u> 3-3/-95</u>

Date

<sup>\*</sup> Attach letter of authorization if not currently on file.

#### **Scope of Application**

This Application for Air Permit addresses the following emissions unit(s) at the facility (or Title V source). An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

<b>Emissions Unit Id</b>	Description of Emissions Unit
СТ	Combustion Turbine
	·
	· · · · · · · · · · · · · · · · · · ·
-	

#### Purpose of Application and Category

Check one (except as otherwise indicated):

## Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

T	nis A	Application for Air Permit is submitted to obtain:
[	]	Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
[	]	Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
		Current construction permit number:
[	.]	Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.
		Operation permit to be renewed:
[	.]	Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.
		Current construction permit number:
		Operation permit to be revised:
<b>[</b>	]	Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.
		Operation permit to be revised/corrected:
[	1	Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.
		Operation permit to be revised:
		Reason for revision:

## Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

Thi	is A	application for Air Permit is submitted to obtain:								
[	]	Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.								
	Current operation/construction permit number(s):									
[	]	Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.								
		Operation permit to be renewed:								
[	[ ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions u									
	Operation permit to be revised:									
		Reason for revision:								
		,								
		<u>.                                      </u>								
Cat	tego	ory III: All Air Construction Permit Applications for All Facilities and Emissions Units								
Thi	is A	application for Air Permit is submitted to obtain:								
[ ×	( ]	Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).								
		Current operation permit number(s), if any: AC 01-204652								
[	]	Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.								
		Current operation permit number(s):								

## 

3. Projected Date of Completion of Construction (DD-MON-YYYY):

#### Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky

Registration Number: 14996

2. Professional Engineer Mailing Address:

Organization/Firm: KBN Engineering & Applied Sciences, Inc.

Street Address: 6241 NW 23rd Street, Suite 500

City: Gainesville

State: FL

Zip Code: 32653-1500

3. Professional Engineer Telephone Numbers:

Telephone: (904) 336-5600

Fax: (904) 336-6603

- 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 (a) 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; or (b) for any application for a Title V source air operation permit, 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;
  - (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; and
  - (3) For any application for an air construction permit for one or more proposed new or modified emissions units, 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.

Signature, in

Date

ttach any exception to certification statement.

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

Effective: 11-23-94

#### **Application Contact**

1. Name and Title of Application Contact: Scott Osbourn, Sr. Environmental Engineer

2. Application Contact Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: 3201 34th Street South (P.O. Box 14042, Zip 33733)

City: St. Petersburg

State: FL

Zip Code: 33711

3. Application Contact Telephone Numbers:

Telephone: (813)866-5158

Fax: (813) 866-4926

#### **Application Comment**

This application is submitted to obtain an increase in the short-term (hourly) permit limitation for  $NO_x$  emissions and fuel flow (heat input).

It is requested that the heat input be increased based on the performance tests. The maximum fuel usage rate to the turbine when firing natural gas in the current permit is 367.9 Mcf/hr. The maximum operating condition is at 45°F with a fuel input of 420.3 Mcf/hr and is based on GE data and the test results. During the compliance tests, the CT averaged 97 percent of the maximum heat input based on CT inlet temperature conditions. The requested maximum heat input corresponds to the maximum emission limit requested for NO.

Increase short-term [pounds per hour (lb/hr)] CT emission rate to 39.6 lb/hr when firing natural gas based on a requested increase in heat input. The basis for the limit is still 25 parts per million by volume, dry (ppmvd) corrected to 15 percent  $O_2$ .

There will be no increase in annual NO<sub>x</sub> emissions.

#### II. FACILITY INFORMATION

#### A. GENERAL FACILITY INFORMATION

#### Facility Name, Location, and Type

			<del>_</del>					
1.	Facility Owner or Operator: Florida Power Corporation							
2.	Facility Name:	University of Florida	Cogeneration Facility					
3.	Facility Identification	cation Number:	[ ] Unknown					
4.	Facility Locatio	n Information:						
	Facility Street A	Address: P.O. Box 11	2295, Mowry Road; Universit	y of Florida				
	City: Gainesville	•	County: Alachua	Zip Code: 32611-2295				
				•				
5.	Facility UTM C	Coordinates:						
٠.	Zone: 17	East (km): 369.4	North (km): 3279.3					
		(,						
6.	Facility Latitude	e/Longitude:						
	Latitude (DD/M	(M/SS): 29/38/23	Longitude (DD/MM	[/SS): 82/20/55				
7.	Governmental	8. Facility Status	9. Relocatable	10. Facility Major				
	Facility Code:	Code:	Facility?	Group SIC Code:				
	0	Α	[] Yes [X] No	49				
11.	11. Facility Comment:							

#### **Facility Contact**

1. Name and Title of Facility Contact: R.W. Anderson, Plant Manager

2. Facility Contact Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: P.O. Box 112295

City: Gainesville

State: Florida

9

Zip Code: 32611-2295

3. Facility Contact Telephone Numbers:

Telephone: (904) 337-6900

Fax: (904) 337-6920

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

Effective: 11-23-94

#### **Facility Regulatory Classifications**

1.	Small Business Stationary Source?		
	[ ] Yes	[X] No	[] Unknown
		( ,, , , , ,	, , , , , , , , , , , , , , , , , , , ,
2	Title V Source?		
~.	[X] Yes	[ ] No	
	[	1 110	
2	Cunthetic Non Title V Course?		
3.	Synthetic Non-Title V Source?  [ ] Yes	[X] No	
	[ ] les	[ X ] NO	
4.	Major Source of Pollutants Other than		ts (HAPs)?
	[X] Yes	[ ] No	
5.	Synthetic Minor Source of Pollutants	Other than HAPs?	
	[ ] Yes	[ X ] No	
6.	Major Source of HAPs?		
	[ ] Yes	[ ] No	[X] Possible*
7	Synthetic Minor Source of HAPs?		
'`	[ ] Yes	[ X ] No	
	1 1 103	[ X ] 110	'
0	One on More Emissions Units Subject	to MCDC2	
0.	One or More Emissions Units Subject		
	[X] Yes	[ ] No	
9.	One or More Emissions Units Subject		
	[ ] Yes	[X] No	
10	. Title V Source by EPA Designation?		
	[ ] Yes	[ <b>X</b> ] No	
11	. Facility Regulatory Classifications C	omment:	
	*HAPs information will be submitted in		
	, ·		

#### **B. FACILITY REGULATIONS**

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of federal, state, and local regulations applicable to the facility as a whole. (Regulations applicable to individual emissions units within the facility are addressed in Subsection III-B of the form.)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not applicable for this application
·

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Not applicable	
	·
	· ·
· · · · · · · · · · · · · · · · · · ·	
	·

#### C. FACILITY POLLUTANT INFORMATION

This subsection of the Application for Air Permit form allows for the reporting of potential and estimated emissions of selected pollutants on a facility-wide basis. It must be completed for each pollutant for which the applicant proposes to establish a facility-wide emissions cap and for each pollutant for which emissions are not reported at the emissions-unit level.

Pollutant of N	lot Applicable
<u> </u>	(tons/yr)
(lb/hr)	(tons/yr)
de:	
Pollutant of	,
	(tons/yr)
(lb/hr)	(tons/yr)
de:	•
	•
	(lb/hr) le:  Pollutant of  (lb/hr)

## Facility Pollutant Information Pollutant \_\_\_\_ of \_\_\_\_

	•	
Pollutant Emitted:		· .
Estimated Emissions:		(tons/yr)
Requested Emissions Cap:	(lb/hr)	(tons/yr)
Basis for Emissions Cap Code:		
Facility Pollutant Comment:		
ility Pollutant Information Poll Pollutant Emitted:	lutant of	
Estimated Emissions:		(tons/yr)
	,	(**************************************
Requested Emissions Cap:	(lb/hr)	(tons/yr)
Basis for Emissions Cap Code:		
Facility Pollutant Comment:		
	Estimated Emissions:  Requested Emissions Cap:  Basis for Emissions Cap Code:  Facility Pollutant Comment:  ility Pollutant Information Pollutant Emitted:  Estimated Emissions:  Requested Emissions Cap:  Basis for Emissions Cap Code:	Estimated Emissions:  Requested Emissions Cap: (lb/hr)  Basis for Emissions Cap Code:  Facility Pollutant Comment:  ility Pollutant Information Pollutant of  Pollutant Emitted:  Estimated Emissions:  Requested Emissions Cap: (lb/hr)  Basis for Emissions Cap Code:

#### D. FACILITY SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the facility as a whole. (Supplemental information related to individual emissions units within the facility is provided in Subsection III-I of the form.) Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

#### Supplemental Requirements for All Applications

1.	Area Map Showing Facility Location:  [ ] Attached, Document ID:  [ X ] Not Applicable  [ ] Waiver Requested
2.	Facility Plot Plan:  [ ] Attached, Document ID:  [ X ] Not Applicable  [ ] Waiver Requested
3.	Process Flow Diagram(s):  [ ] Attached, Document ID(s):  [ X ] Not Applicable
4.	Precautions to Prevent Emissions of Unconfined Particulate Matter:  [ ] Attached, Document ID:  [ X ] Not Applicable
5.	Fugitive Emissions Identification:  [ ] Attached, Document ID:  [ X ] Not Applicable
6.	Supplemental Information for Construction Permit Application:  [ ] Attached, Document ID:
Add	ditional Supplemental Requirements for Category I Applications Only  Not Applicable
7.	List of Insignificant Activities:  [ ] Attached, Document ID: [ ] Not Applicable
8.	List of Equipment/Activities Regulated under Title VI:  [ ] Attached, Document ID:

9. Alternative Methods of Operation:  [ ] Attached, Document ID:  [ ] Not Applicable
10. Alternative Modes of Operation (Emissions Trading):  [ ] Attached, Document ID:  [ ] Not Applicable
11. Enhanced Monitoring Plan:  [ ] Attached, Document ID:  [ ] Not Applicable
<ul> <li>12. Risk Management Plan Verification:</li> <li>[ ] Plan Submitted to Implementing Agency - Verification Attached Attached, Document ID:</li></ul>
13. Compliance Report and Plan  [ ] Attached, Document ID:  [ ] Not Applicable
14. Compliance Statement (Hard-copy Required)  [ ] Attached, Document ID:  [ ] Not Applicable

Emissions Unit Information Section1 of1
III. EMISSIONS UNIT INFORMATION
A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.
A. GENERAL EMISSIONS UNIT INFORMATION
This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.
Type of Emissions Unit Addressed in This Section
Check one:
[ X ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive

This Emissions Unit Information Section addresses, as a single emissions unit, one or

more process or production units and activities which produce fugitive emissions

emissions.

only.

. [ ]

#### **Emissions Unit Description and Status**

Description of Emissic Combustion Turbine - Co	ons Unit Addressed in This Section GE LM6000	
2. ARMS Identification	Number: [ ] No Corresponding	ID [ ] Unknown
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major
Code: A	[X] Yes [] No	Group SIC Code:
		49
6. Initial Startup Date (D	D-MON-YYYY): ???	
7. Long-term Reserve Sh	nutdown Date (DD-MON-YYYY):	Not Applicable
8. Package Unit: Manufacturer: General	Electric Model Numbe	r: LM6000
9. Generator Nameplate	Rating: 43 MW (Nominal)	
10. Incinerator Informati	on: Not Applicable	
Dwel	l Temperature:	°F
	Dwell Time:	seconds
Incinerator Afterburner	Temperature:	°F
11. Emissions Unit Com	ment:	

Emi	sions Unit Information Section 1 of 1
<u>Emi</u>	sions Unit Control Equipment
Α.	
1.	Description: Steam Injection
2.	Control Device or Method Code: 028
В.	
1.	Description:
2.	Control Device or Method Code:
C.	
1.	Description:
2.	Control Device or Method Code:

**Emissions Unit Operating Capacity** 1. Maximum Heat Input Rate: 432.9 MMBtu/hr 2. Maximum Incineration Rate: Not Applicable lbs/hr tons/day 3. Maximum Process or Throughput Rate: Not Applicable 4. Maximum Production Rate: Not Applicable 5. Operating Capacity Comment: An increase in the maximum natural gas short-term input rate is requested. The construction permit has a fuel input limit of 367.9 thousand cubic feet of natural gas per hour (Mcf/hr). An increase to 420.3 Mcf/hr is requested. The maximum heat input indicated above is based on the requested fuel input limit and a representative figure for heating value, e.g., using 1,030 Btu/cf (HHV). **Emissions Unit Operating Schedule** Requested Maximum Operating Schedule: days/week hours/day weeks/yr 8,760 hours/yr

Emissions Unit Information Section \_\_\_\_ of \_\_\_\_

<b>Emissions</b>	Unit	Information	Section	1	of	1
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#### **B. EMISSIONS UNIT REGULATIONS**

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

<u>Rule Applicability Analysis</u> (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable				
•				·
		•		
			·	
	·			

Emissions Unit Information Section 1 o	f <u>1</u>
<u>List of Applicable Regulations</u> (Required for applications involving Title-V sources. See Ins	Category I applications and Category III structions.)
62-296.800(3)(a)37	-
62-297.310	, .
62-297.330	
62-297.340	_
62-297.345 (1) and (3)	
62-297.350	-
62-297.400	
62-297.401 (20)	
40 CFR 60 Subpart GG	
`	
<u> </u>	

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Emissions Unit Information Section 1 of 1

#### C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

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

Identification of Point on Plot Plan or Flow Diagram: Not Applicable
Emission Point Type Code:
[X]1 []2 []3 []4
Descriptions of Emissions Points Comprising this Emissions Unit:  Combustion turbine exhaust through a heat recovery steam generator (HRSG) and a single stack.
ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable
Discharge Type Code:
[ ] D

#### Emissions Unit Information Section \_\_1\_\_ of \_\_1\_

6. Stack Height:		93	ft	
7. Exit Diameter:		9.75	ft	
8. Exit Temperature:		257	°F	
9. Actual Volumetric Flow Rate:		365,700	acfm	
10. Percent Water Vapor:		11.25	%	
11. Maximum Dry Standard Flow	Rate:	235,380	dscfm	
12. Nonstack Emission Point Heig	ght:	Not Applicable	ft	
13. Emission Point UTM Coordina	ates:			
13. Emission Point UTM Coordina Zone:	ates: East (km)	: ]	North (km):	
		: ]	North (km):	
Zone:	East (km)	<u> </u>		
Zone:  14. Emission Point Comment:	East (km)	<u> </u>		
Zone:  14. Emission Point Comment:	East (km)	<u> </u>		
Zone:  14. Emission Point Comment:	East (km)	<u> </u>		
Zone:  14. Emission Point Comment:	East (km)	<u> </u>		
Zone:  14. Emission Point Comment:  Information for natural gas firing	East (km)	<u> </u>		

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

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate Information: Segment 1 of 1

and Associated Operating Method/Mode):
201
5. Maximum Annual Rate: 2,997.2*
plicable
8. Maximum Percent Ash: <0.1
ble of and authorized to fire distillate oil. No egment information is not included in this ermit for more detail.

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Em	issions Unit Information Section <u>1</u> of	<u> </u>
Seg	ment Description and Rate Information:	Segment of Not Applicable
1.	Segment Description (Process/Fuel Type a	and Associated Operating Method/Mode):
2.	Source Classification Code:	
3.	SCC Units:	
4.	Maximum Hourly Rate:	5. Maximum Annual Rate:
6.	Estimated Annual Activity Factor:	
7.	Maximum Percent Sulfur:	8. Maximum Percent Ash:
9.	Million Btu per SCC Unit:	
10.	Segment Comment:	· · · · · · · · · · · · · · · · · · ·

Emissions Unit Information Section \_\_1 of \_\_1

#### E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

<b>Pollutant</b>	Potential/Estimated	<b>Emissions:</b>	Pollutant	_1_	of	_1_

1. Pollutant Emitted: NO <sub>x</sub>		
2. Total Percent Efficiency of Control:	~80 %	
3. Primary Control Device Code: 028		
4. Secondary Control Device Code:		
5. Potential Emissions:	39.6 lbs/hr	<b>142.7</b> tons/yr
6. Synthetically Limited? [ ] Yes	[ X ] No	
7. Range of Estimated Fugitive/Other Emissions:	Not Applicable	·
[]1	[ ] 3	to tons/yr
8. Emission Factor: 25 ppmvd corrected to 15%	O <sub>2</sub>	
Reference: Permit limit		:
9. Emissions Method Code:		<b>.</b>
[]1 [X]2 []3	. [ ] 4	[ ] 5
10. Calculation of Emissions: Provided by manufac	turer and perform	ance tests
11. Pollutant Potential/Estimated Emissions Commemission rate requested based on performance of contesting. Existing limit is 35 lbs/hr. No increase in a	nbustion turbine d	uring initial compliance

Emi	issions Unit Information Section <u>1</u> of <u>1</u>
Allo	owable Emissions (Pollutant identified on front page)
1.	Basis for Allowable Emissions Code: Other
2.	Future Effective Date of Allowable Emissions: Not Applicable
3.	Requested Allowable Emissions and Units: 39.6 lbs/hr
4.	Equivalent Allowable Emissions: 39.6 lbs/hr 142.7 tons/yr
5.	Method of Compliance: Annual Compliance Test
	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): continuous monitoring system (CMS) of steam-to-fuel ratio is used as a monitoring technique.
	Not Applicable
1.	Basis for Allowable Emissions Code:
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
4.	Equivalent Allowable Emissions: lbs/hr tons/yr
5.	Method of Compliance:
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):

Emissions	Unit	Information	Section	1	of	_1_
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#### Not Applicable

#### F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

<u>Visi</u>	ble Emissions Limitations: Visible Emissions Limitation of
1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity: Normal Conditions:  % Exceptional Conditions:  %
	Maximum Period of Excess Opacity Allowed: min/hr
4.	Method of Compliance:
5.	Visible Emissions Comment:

29

Visible Emissions Limitations: Visible Emissions Limitation of	Not Applicable
1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity: [ ] Rule [ ] Other	
3. Requested Allowable Opacity: Normal Conditions:	%
Maximum Period of Excess Opacity Allowed:	min/hr
4. Method of Compliance:	
5. Visible Emissions Comment:	
Visible Emissions Limitations: Visible Emissions Limitation of	
	· .
Visible Emissions Limitations: Visible Emissions Limitation of  1. Visible Emissions Subtype:	
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity:</li> </ol>	
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> </ol>	%
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions:</li> </ol>	
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity:</li> </ol>	%
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:</li> <li>Method of Compliance:</li> </ol>	%
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:</li> </ol>	%
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:</li> <li>Method of Compliance:</li> </ol>	%
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:</li> <li>Method of Compliance:</li> </ol>	%
<ol> <li>Visible Emissions Subtype:</li> <li>Basis for Allowable Opacity: [ ] Rule [ ] Other</li> <li>Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:</li> <li>Method of Compliance:</li> </ol>	%

Emissions Unit Information Section \_\_\_1 of \_\_1

#### G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (fields 1-6) must be completed for each monitoring system required.

<u>Continuous Monitoring System</u> Continuous Monitor <u>1</u> of <u>1</u>

- 1. Parameter Code: NO<sub>x</sub>
- 2. CMS Requirement:

- [X] Rule
- [ ] Other

3. Monitor Information: (see comment)

Manufacturer:

Model Number:

Serial Number:

- 4. Installation Date (DD-MON-YYYY): 1994
- 5. Performance Specification Test Date (DD-MON-YYYY): 1994
- 6. Continuous Monitor Comment: Steam-to-fuel ratio is monitored on a continuous basis using steam and fuel flow devices. Information is used to calculate hourly emissions based on an equation developed during initial testing. The equation is:

 $NO_x$  (lb/hr) = 8.4783 + (-17.33488) \* S/F ratio + 0.00014 \* FF

where: S/F ratio is the steam to fuel ratio.  $r^2 = 0.98709$  for equation. FF is fuel flow in 1,000 scf/hr.

1	tinuous Monitoring System Continuous Mo	onitor of	Not Applicable
	Parameter Code:		_
•	CMS Requirement:	[ ] Rule	[ ] Other
3.	Monitor Information:		
	Manufacturer:		
4.	Model Number: Installation Date (DD-MON-YYYY):	Serial Numbe	r:
5.	Performance Specification Test Date (DD-N	ION-YYYY):	
6.	Continuous Monitor Comment:		
		•	
on	tinuous Monitoring System Continuous M	onitor of	
	Parameter Code:	onitor of	
1.		onitor of	[ ] Other
1. 2.	Parameter Code:		[ ] Other
1. 2.	Parameter Code:  CMS Requirement:  Monitor Information:  Manufacturer:	[ ] Rule	
1. 2. 3.	Parameter Code:  CMS Requirement:  Monitor Information:  Manufacturer: Model Number:		
1. 2. 3.	Parameter Code:  CMS Requirement:  Monitor Information:  Manufacturer:	[ ] Rule	
1. 2. 3.	Parameter Code:  CMS Requirement:  Monitor Information:  Manufacturer: Model Number:	[ ] Rule Serial Numbe	