

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

PSD-FL-1804

In the Matter of an
Application for Permit Modification by:

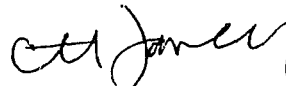
Florida Power Corporation (FPC) -Intercession City Plant
Post Office Box 14042 - MAC BB1A
St. Petersburg, Florida 33733

DEP File No. 0970014-002-AC, (PSD-FL-1804)[#]
Intercession City Plant
Units 7-10 Inlet Fogger Project
Osceola County

Enclosed is the Final Permit Number 0970014-002-AC, PSD-FL-1804^H, for a modification of FPC's existing air construction permit to install foggers at the compressor inlets of four 93-megawatt natural gas and No. 2 fuel oil-fired General Electric PG7111EA combustion turbine-electrical generators at the Intercession City Plant in Osceola County

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

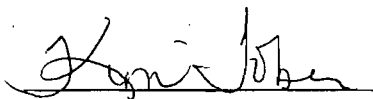
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT MODIFICATION (including the FINAL permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5-17-99 to the person(s) listed:

W. Jeffrey Pardue, FPC*
Jennifer Tillman, P.E., FPC
Len Kozlov, DEP, CD
Gregg Worley, EPA
John Bunyak, NPS

Clerk Stamp

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


(Clerk)

5-17-99
(Date)

FINAL DETERMINATION

Florida Power Corporation
Intercession City Plant
Units 7-10 Inlet Fogger Project
Osceola County
DEP File No. 0970014-002-AC (PSD-FL-180B)

An Intent to Issue an air construction permit was distributed on March 12, 1999. It authorized the installation of the installation of inlet foggers at the Intercession City's compressor inlets of four 93 MW turbine-electrical generators. This facility is located at 6525 Osceola Polk County Line Road, Intercession City, Osceola County.

The Public Notice of Intent to Issue Air Construction Permit was published in the Osceola News Gazette on April 10, 1999.

No comments were received as a result of the public notice.

The final action of the Department will be to issue the permit as noticed.

Z 333 618 148

US Postal Service
Receipt for Certified Mail

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

Sent to	
Jeff Pardue	
Street & Number	
FPC	
Post Office, State, & ZIP Code	
St. Pete FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered.	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	0970014-002-AC 5-17-99

PS Form 3800 April 1995

Fold at line over top of envelope to the right of the return address

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jeffrey Pardue
FPC
PO Box 14042
St. Petersburg, FL

33733

4a. Article Number

Z 333 618 148

4b. Service Type

- Registered Certified
- Express Mail Insured
- Return Receipt for Merchandise COD

7. Date of Delivery

MAY 19 1999

5. Received By: (Print Name)

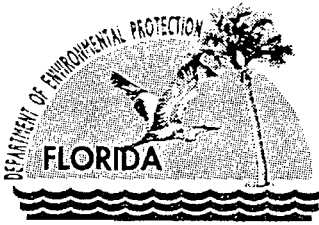
6. Signature (Addressee or Agent)

X

[Signature]

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042 MAC BB1A
St. Petersburg, Florida 33733

DEP File No.	0970014-002-AC
Permit No.	PSD-FL-180B
Project	Peaking Unit Nos. 7-11
SIC No.	4911
Expires:	December 31, 1999

Authorized Representative:

W. Jeffrey Pardue, CEP
Director, Environmental Services

PROJECT AND LOCATION:

Re-issued and modified permit for the construction of five simple cycle combustion turbine-electrical generators (Peaking Units Nos. 7-11). This action also provides for installation of inlet foggers on the four 92.9 megawatt simple cycle General Electric PG7111EA combustion turbine-electrical generators (Peaking Units 7-10), collectively designated as Emission Unit No. 002. This permit includes a 171 MW Siemens V84.3 combustion turbine-electrical generator (Peaking Unit 11) designated as Emission Unit 003 that is unaffected by this action.

The units are located at the FPC Intercession City Plant, 6525 Osceola Polk County Line Road, Intercession City, Osceola County.

UTM coordinates are: Zone 17; 446.3 km E and 3126 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

ATTACHED APPENDICES MADE A PART OF THIS PERMIT:

Appendix GC	Construction Permit General Conditions
Appendix SC	Specific Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This re-issued permit incorporates previous determinations for:
- a) Best Available Control Technology (X)
 - b) Prevention of Significant Deterioration (X); and
 - c) New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
-

APPENDIX SC
SPECIFIC CONDITIONS

1. This permit supersedes permit AC49-203114 (PSD-FL-180), dated August 17, 1992 to install six simple cycle combustion turbine-electrical generators and its revisions dated:
 - October 6, 1993 – Test and Compliance Methods.
 - November 15, 1993 – Fuel Oil No. 2 in lieu of F, Hg, Pb, As, and Be Limits
 - July 15, 1994 – Substitute one 171 MW Siemens V84.3 for two 185.5 MW GE 7FA
 - September 21, 1994 – Manufacturer’s Heat Input to Ambient Temperature Curve
 - January 20, 1995 – Compliance Testing Requirements
 - August 10, 1995 – Natural Gas Use
 - December 15, 1997 – NSPS Custom Fuel Monitoring Schedule
2. The provisions of the air construction permit AC49-203114 (PSD-FL-180), dated August 17, 1992 and the revisions to that permit, attached and listed above, are incorporated into this air construction permit.
3. Inlet foggers may be installed at the compressor inlet to each of the four simple cycle General Electric PG7111EA combustion turbine-electric generators. The four foggers may operate up to 7,000 hours per year in aggregate (average 1750 hours per unit per year).

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes

Thru: Clair Fancy
Al Linero *CLF*

FROM: Teresa Heron *T.H.*

DATE: May 12, 1999

SUBJECT: FPC Intercession City Inlet Fogger Project
DEP File No. 0970014-002-AC

BAR

Attached for approval and signature is the final permit modification for the inlet fogger project. The application is to install inlet foggers ahead of the compressor inlets of four simple cycle combustion turbines. The foggers will operate on hot days and days of relatively low humidity. The evaporative cooling effected by the foggers will allow the units to operate closer to their rated capacity.

Emissions will increase because the heat rate through the units will increase when the foggers are used and effectively cool the inlet air. FPC proposes to limit operation of the coolers to 1,800 hours per unit per year to insure PSD is not triggered by their use. The issue of making a future potential to past actual annual emission increase calculation is extensively addressed in the Technical Evaluation.

I recommend your signature and approval of the cover letter and Intent to Issue.

AAL/aal

Attachments



April 30, 1999

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

Dear Mr. Linero:

Re: Intercession City Inlet Fogging - Proof of Publication

I have enclosed the proof of publication of the Public Notice of Intent to Issue Air Construction Permit Modification for the inlet fogging project at Florida Power Corporation's Intercession City facility.

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

Sincerely,

A handwritten signature in black ink, appearing to read "J. Michael Kennedy".

J. Michael Kennedy, Q.E.P.
Manager, Air Programs

cc: Alinero, BAC - file
CD

RECEIVED

MAY 03 1999

BUREAU OF
AIR REGULATION

PROOF OF PUBLICATION

**STATE OF FLORIDA,
COUNTY OF OSCEOLA**

Before me, the undersigned authority, personally appeared Dan L. Autrey, who on oath says that he is General Manager of the Osceola News-Gazette, a twice weekly newspaper published at Kissimmee, in Osceola County, Florida; that the attached copy of the advertisement was published weekly in the regular and entire edition of said newspaper in the issues of:

..... April 10, 1999.....

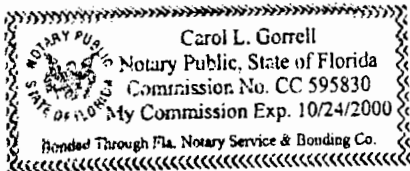
Affiant further says that the Osceola News-Gazette is a newspaper published in Kissimmee, in said Osceola County, Florida, and that the said newspaper has heretofore been continuously published in said Osceola County, Florida, each week and has been entered as periodicals postage matter at the post office in Kissimmee, in said Osceola County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Dan L. Autrey

Sworn to and subscribed before me by Dan L. Autrey, who is personally known to me, this . . . J.O. . . day of

..... April 1999.....

Carol L. Gorrell
Carol L. Gorrell
(N.P. Seal)



PROOF OF PUBLICATION

FROM

Osceola News-Gazette

**Kissimmee, Florida
OSCEOLA COUNTY**

In the Matter of


*Public Notice of Intent To
Issue Air Construction
Permit Modification*

Filed day of 19
First Publication .. *April 10* .. 19*99* ..
Last Publication .. *April 10* .. 19*99* ..

**Make Remittance to Osceola News-Gazette
Kissimmee, Florida**

**LEGAL
AD
DEADLINE
IS
FRIDAY
at
5:00 PM**

You Can
UNLOCK
YOUR MONEY'S POTENTIAL



PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DEP File No. 0970014-002-AC (PSD-FL-180B)
 Florida Power Corporation Intercession City Plant
 Units 7-10 Inlet Fogger Project
 Osceola County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Florida Power Corporation (FPC). The permit is to install foggers at the compressor inlets of four 93- megawatt natural gas and No. 2 fuel oil-fired General Electric PG7111EA combustion turbine-electrical generators at the Intercession City Plant in Osceola County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are Florida Power Corporation, Post Office Box 14042, MAC BB1A, St. Petersburg, Florida 33733.

These units normally achieve their maximum rated output on cold days because the greater compressor inlet density allows greater throughput in the rotor or expansion section of the combustion turbine. The maximum power output is lower on hot days because of the lower compressor inlet density. The foggers increase hot-day power output by approximately 4-6 MW through evaporative cooling of the compressor inlet air although maximum output overall temperatures will remain 93 MW or below. The foggers provide no benefit on very humid or cold days and will not be used under those conditions. The result is that maximum hourly air pollution emissions will not increase although actual annual emissions will increase within their permitted limits because more fuel will be used on hot, relatively dry days.

Although the number of days during which the foggers can economically operate probably limits emissions increases to levels below significance for the purposes of PSD applicability, FPC proposes enforceable conditions to insure non-applicability, FPC asserts and the Department accepts that the modification will not cause any meaningful change in the hours of operation of these simple cycle peaking units. They are already limited to 3390 hours of operation per unit. The maximum increase in annual emissions caused by project in tons per year is summarized below along with the PSD-significant levels.

<u>Pollutants</u>	<u>Annual Emissions Increase</u>	<u>PSD Significant Levels</u>
PM/PM ₁₀	3	25/15
SAM	3	7
SO ₂	40	40
NO _x	39	40
VOC	1	40
CO	11	100

An air quality impact analysis was not required or conducted. No significant impacts are expected to occur as a result of this project. It will not cause or contribute to a violation of any ambient air quality standard or increment.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit Modification." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. 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, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 29-106.301.

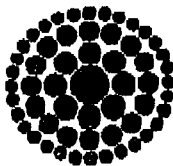
Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of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

A complete project file 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
 Telephone: 850/488-0114
 Fax: 850/922-6979

Department of Environmental Protection
 Central District Office
 3319 Maguire Boulevard, Suite 232
 Orlando, Florida 32803-3767
 Telephone: 407/894-7555
 Fax: 407/897-5963

The complete project file includes the application, technical evaluation, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.



Florida Power
CORPORATION

Date: 3/15/99

To: Al Liners, DEP BAR

FAX #: (850) 922-6979

Phone #: (850) 488-1344

From: [Signature]

FAX #: (727) 826-4216

Phone #: (727) 826-4258

9 Total number of pages including cover page.

Please notify _____ at (727) 826 - _____ for any problems concerning the receipt of this FAX.

Comments:

As we discussed, please feel free to call
either Mike or me if you have any questions.

[Signature]

B

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0970014-002-AC (PSD-FL-180B)

Florida Power Corporation Intercession City Plant
Units 7-10 Inlet Fogger Project
Osceola County

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Although the number of days during which the foggers can economically operate probably limits emissions increases to levels below significance for the purposes of PSD applicability, FPC proposes enforceable conditions to insure non-applicability. FPC asserts and the Department accepts that the modification will not cause any meaningful change in the hours of operation of these simple cycle peaking units. They are already limited to 3390 hours of operation per unit. The maximum increase in annual emissions caused by project in tons per year is summarized below along with the PSD-significant levels.

<u>Pollutants</u>	<u>Annual Emission Increase</u>	<u>PSD Significant Levels</u>
PM/PM ₁₀	3	25/15
SAM	3	7
SO ₂	40 39.9	40
NO _x	39	40
VOC	1	40
CO	11	100

the equivalent of (or average of)

An air quality impact analysis was not required or conducted. No significant impacts are expected to occur as a result of this project. It will not cause or contribute to a violation of any ambient air quality standard or increment.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit Modification." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mall Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

BEST AVAILABLE COPY

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. Applicant

Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33711

Authorized Representative: W. Jeffrey Pardue, CEP

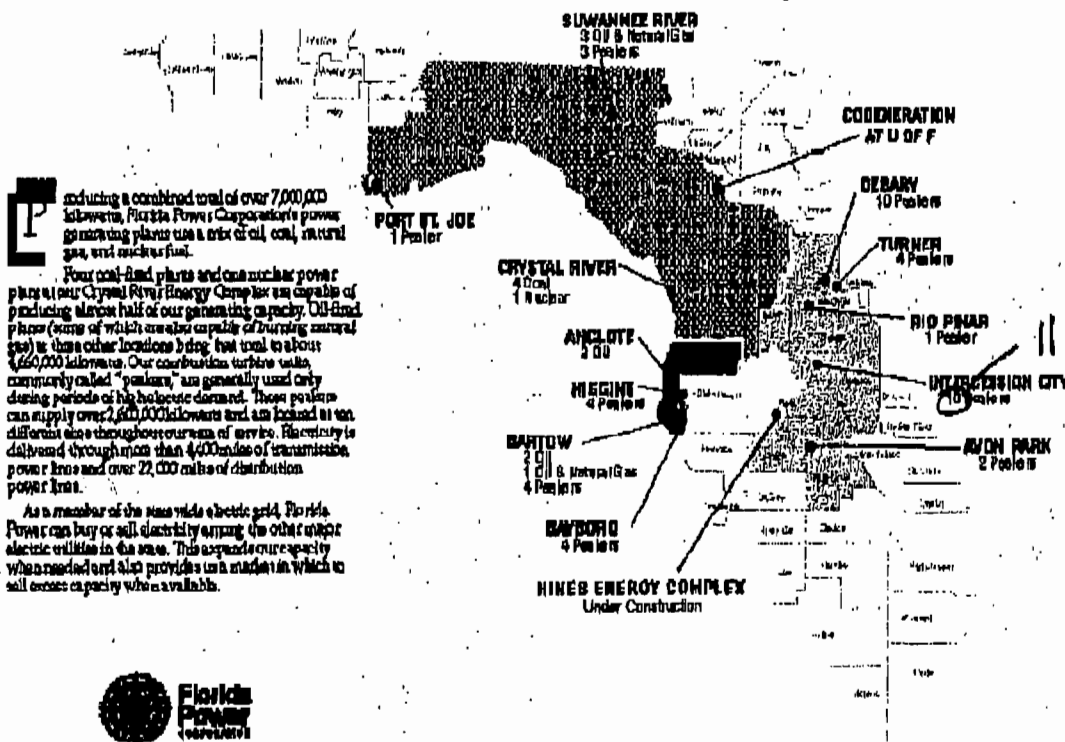
2. Source Name and Location

Intercession City Plant
Units P7, P8, P9, P10
Intercession City, Osceola County

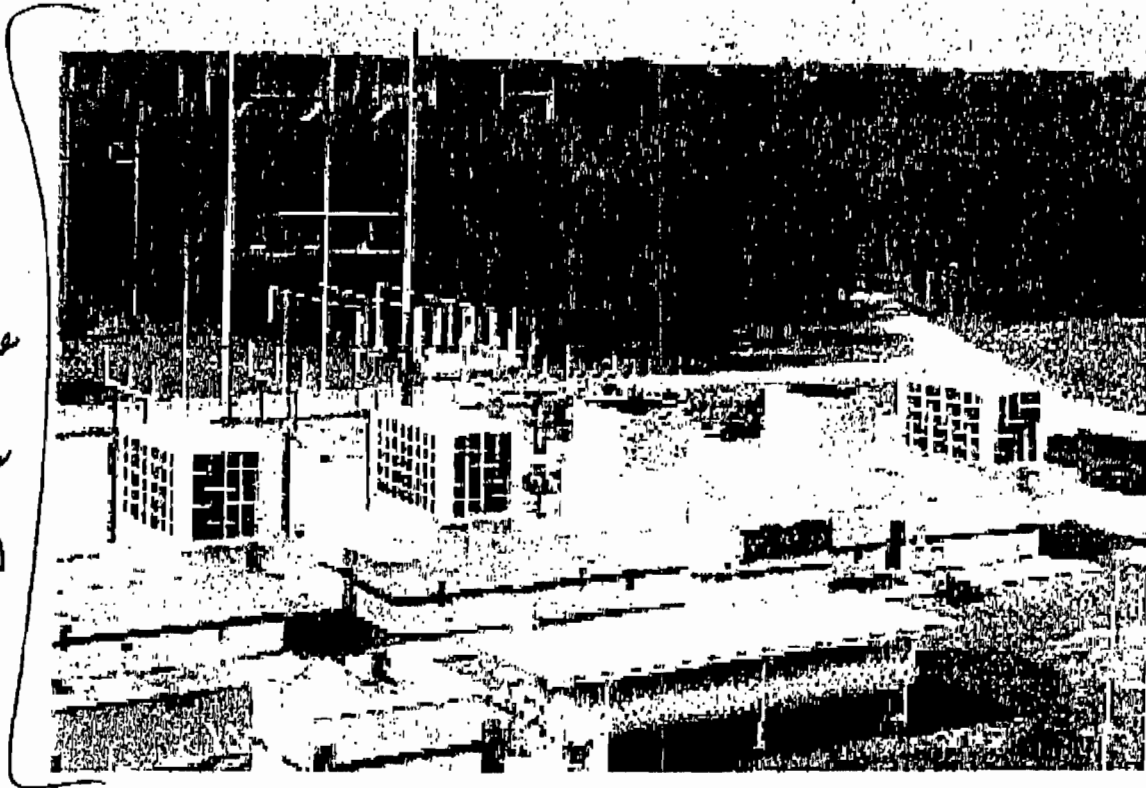
UTM Coordinates: Zone 17, 446.3 km East and 3126 km North

The location of the Intercession City Plant within the FPC system is shown below followed by a photograph of the site downloaded from the FPC website:

Power Production Facilities



TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION



*This is
a picture
of our
Summer
facility*

3. Source Description

The Florida Power Corporation (FPC) Intercession City Plant consists of ^{eleven} ~~ten~~ combustion turbine peaking units. Units Nos. P7, P8, P9, and P10 (designated collectively as Emission Unit 002) are each 92.9 megawatt simple cycle General Electric PG7111EA combustion turbine-electrical generators. The units are fired with pipeline natural gas or No. 2 fuel oil containing 0.2 percent (%) or less sulfur. Annual hours of operation per unit are limited to ^{the equivalent of} 3,390 or less based on a sliding scale related to the fuel sulfur content. Control measures and equipment consist of firing clean fuels, good combustion practices, and wet injection.

4. Current Permit and Major Regulatory Program Status

Construction of Units P7-P10 was authorized by the Department's Prevention of Significant Deterioration (PSD) Permit No. PSD-FL-180 and Air Construction Permit AC49-203114 issued in October 1993. Two other larger units were also authorized but only one was constructed. The ~~four~~ ^{five} units along with six other units at the plant are operated under Title V Air Operation Permit No. 0970014-001-AV issued in January 1998.

The initial construction of Units P7-P10 (and P11) was authorized pursuant to the Department's Preconstruction Review and Permitting requirements in Rules 62-210 and 62-212, F.A.C. The units were also reviewed in accordance with the New Source Performance Standard (NSPS) Subpart GG - Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800, F.A.C.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

5. Permit Modification Request

On February 24, 1998 the Department received a request from FPC for modification of its permits to install inlet foggers at the compressor inlets of Units P7-P10. These units normally achieve their maximum rated output on cold days because the greater compressor inlet air density allows greater throughput in the rotor or expansion section of the combustion turbine. The maximum power output is lower on hot days because of the lower compressor inlet density. The foggers increase hot-day power output by approximately 4-6 MW through evaporative cooling of the compressor inlet air although maximum output over all temperatures will remain 93 MW or below. The foggers provide little or ~~no~~ ^{average} benefit on humid or cold days and will not be used under those conditions.

Inlet foggers are routinely included in new combustion turbine projects and have not affected the Department's decisions regarding Best Available Control Technology.

6. Emissions Increases Due to Modification/Method of Operation

Because the main components of the units, including the compressors, combustors, rotors, fuel system, etc., will not be modified, it is arguable that the inlet foggers are not physical modification of the units. However the foggers are physical pieces of equipment whose addition and use can increase emissions on hot or dry days. The use of the foggers can also be considered a change in method of operation of the inlet "air conditioning system" that is already used to filter incoming air.

FPC estimated the maximum emissions increases by using the heat-input increase associated with a 20 degree F decrease in compressor inlet temperature. Using the heat input curve, a 20-degree F temperature decrease results in an increase in heat input of 60 mmBtu per hour. This value is multiplied by the emission rate in lb/mmBtu to obtain hourly emissions increases. The results are summarized below together with annual emission increase estimates, based on 1,750 hours of operation per fogger per year. The estimates are based on fuel oil firing and would be substantially less when firing natural gas. *the equivalent of*

TOTAL EMISSIONS INCREASES DUE TO USE OF INLET FOGGERS AT FOUR UNITS

Pollutant	Emission Rate <i>lb/mmBtu</i>	Emission Increase <i>lb/hr</i>	Annual Increase <i>tons/yr</i>	PSD Threshold <i>tons/yr</i>
NO _x	See Curve	11	39	40
PM/PM ₁₀	0.015	0.9	3	25/15
CO	0.05	3	11	100
VOC	0.004	0.2	1	40
SO ₂	0.19	11.4	40 39.9	40
SAM	0.016	1	3	⑦ 7.5?

The emissions increases calculated are the direct result from the modification or change in method of operation. These assume that the ability to achieve greater power output when the foggers are used does not result in the increased usage of the peaking units. The rationale is discussed below.

7. Evaluation of PSD Applicability

As a major source, a modification or change in method of operation of Units P7-P10 resulting in significant net emissions increases is subject to PSD review. Significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Actual hours of operation since the start of operations are as follows:

Unit/Year	Annual Operating Hours 1993 - 1998					
	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
P-7	193	873	649	1125	1996	1927
P-8	222	724	562	1269	1974	1796
P-9	68	697	715	1177	2031	1981
P-10	155	579	512	1186	1893	2015

There has been a steady increase in annual hours of operation since these units were installed in 1993. During 1997 and 1998, these units were each utilized between 1,796 and 2031 hours per year or more than half of the 3,390 ^{average} permitted hours of operation per unit per year.

Although recent hours of operation are well below the permitted limits, they are actually fairly high compared with the typically low levels of operation characteristic of peaking units. Among the reasons for the relatively high levels are the prolonged shutdown of the baseloaded Crystal River Nuclear Unit 3 in 1997, the very hot summer of 1998, and the recognized low electrical power reserve margin in the State.

If these peaking units were being entirely replaced by larger units, it would be clear that they have not begun normal operations. In such a case, a comparison of future to past actual emissions would be based on a comparison of potential emissions to past actual emissions. Such a comparison would undoubtedly result in a determination that PSD is applicable unless the company took an extreme limitation in hours of operation.

If a like-kind replacement was being made, the same comparison would also result in a determination that PSD is applicable. That particular case was addressed for the purposes of comparison to the specific case addressed in the Puerto Rican Cement Decision. This is the watershed Federal Circuit Court of Appeals decision that upheld the past actual-to-potential emission comparison applicable to (at least) modernization projects. The comments of interest for the purposes of the present review are as follows:

"One can imagine circumstances that might test the reasonableness of EPA's regulation. An electricity company, for example, might wish to replace a peak load generator -- one that operates only a few days per year -- with a new peak load generator that the firm could, but almost certainly will not, operate every day. And, uncertainties about the precise shape of future electricity peak demand might make the firm hesitate to promise EPA it will never increase actual emissions (particularly since EPA insists, as a condition of accepting the promise and issuing the NAD, that the firm also promise not to apply for permission for an actual increase under the PSD review process). Whatever the arguments about the "irrationality" of EPA's interpretation in such circumstances, however, those circumstances are not present here. The Company is not interested in peak load capacity; it operated its old kilns at low levels in the past; its new, more efficient kiln might give it the economic ability to increase production; consequently, EPA could plausibly fear an increase in actual emissions were it to provide the NAD. Thus, this seems the very type of case for which the regulations quoted above were written. We can find nothing arbitrary or irrational about EPA applying those regulations to the Company's proposal."

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The FPC inlet fogger project is yet another step removed from a modernization project than the like-kind replacement example. The units will not be replaced at all. The modification and its effects can be isolated and directly estimated. The Department believes that the peaking units have begun normal operation. The addition of the inlet foggers will not change that fact or cause an increase in hours of operation. The modification itself (i.e. installation and operation of the foggers), however, has not yet begun normal operation and its future actual emissions based on potential to emit should be initially estimated assuming usage of the units at full capacity during the permitted 3,390 hours per unit per year.

The number of days during which the foggers can economically operate probably limits actual emissions increases to levels below significance for the purposes of PSD applicability. However, FPC proposes to limit operation of the foggers to 1,750 hours per unit per year. This value is approximately equal to the recent historical hours of operation for the four peaking units. It is also a clear indication that compressor air inlet cooling will not cause the units to operate all of the permitted hours. Emissions will increase under these limitations (as previously tabulated) by levels less than the significant emissions rates. The Department concludes, therefore that PSD does not apply to this project.

8. Proposed Addition of New Conditions to Permit PSD-FL-180

The construction permit has expired for the Intercession City Project to construct Units P7 through P11. The Department will re-issue the permit incorporating all other previously approved revisions and modifications to-date and will add a further condition authorizing installation and operation of the inlet foggers.

The new condition applicable to the inlet foggers proposed for Units P7 through P10 are shown in the draft re-issued and modified permit. It limits operation of the inlet foggers to 1,750 hours per unit per year.

9. Conclusions

The changes authorized by this permit modification will not cause increases in hours of operation and will not result in significant net emissions increases. The project will not increase the maximum short-term emission rates as these are already achieved under natural conditions of low ambient temperatures without the use of the foggers.

The Department concludes that PSD is not applicable to this project. The changes will not cause a significant impact or cause or contribute to a violation of any ambient air quality standard or PSD increment.

The Department's conclusion does not set a precedent for projects implemented at any facilities other than simple cycle peaking units. It does not set precedents related to any physical changes within the compressors, combustors, rotors, or other key components at such units. The application and determination of the Department's rules does not constitute an interpretation of the EPA rules under 40CFR52.21, Prevention of Significant Deterioration or 40CFR60, New Source Performance Standards.

PERMITTEE:

Florida Power Corporation
 Post Office Box 14042 MAC BB1A
 St. Petersburg, Florida 33733

Authorized Representative:

W. Jeffrey Pardue, CEP
 Director, Environmental Services

DEP File No.	0970014-002-AC
Permit No.	PSD-FL-180B
Project	Peaking Unit Nos. 7-11
SIC No.	4911
Expires:	December 31, 1999

PROJECT AND LOCATION:

Re-issued and modified permit for the construction of five simple cycle combustion turbine-electrical generators (Peaking Units Nos. 7-11). This action also provides for installation of inlet foggers on the four 92.9 megawatt simple cycle General Electric PG7111EA combustion turbine-electrical generators (Peaking Units 7-10), collectively designated as Emission Unit No. 002. This permit includes a 171 MW Siemens V84.3 combustion turbine-electrical generator (Peaking Unit 11) designated as Emission Unit 003 that is unaffected by this action.

The units are located at the FPC Intercession City Plant, 6525 Osceola Polk County Line Road, Intercession City, Osceola County. Santa Rosa Energy Center and will be located within the boundary of the Sterling Fiber Chemical Plant in Pace, Santa Rosa, County.

UTM coordinates are: Zone 17; 446.3 km E and 3126 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

ATTACHED APPENDICES MADE A PART OF THIS PERMIT:

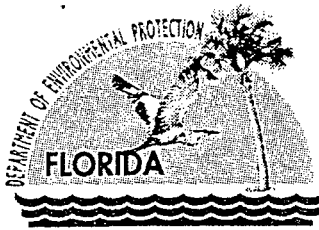
Appendix GC	Construction Permit General Conditions
Appendix SC	Specific Conditions

Howard L. Rhodes, Director
 Division of Air Resources
 Management

3 don't think we've ever used steam?

APPENDIX SC
SPECIFIC CONDITIONS

1. This permit supersedes permit AC49-203114 (PSD-FL-180), dated August 17, 1992 to install six simple cycle combustion turbine-electrical generators and its revisions dated:
 - October 6, 1993 – Test and Compliance Methods. ~~Steam in lieu of Water Injection~~
 - November 15, 1993 – Fuel Oil No. 2 in lieu of F, Hg, Pb, As, and Be Limits
 - July 15, 1994 – Substitute one 171 MW Siemens V84.3 for two 185.5 MW GE 7FA
 - September 21, 1994 – Manufacturer's Heat Input to Ambient Temperature Curve
 - January 20, 1995 – Compliance Testing Requirements
 - August 10, 1995 – Natural Gas Use
 - December 15, 1997 – NSPS Custom Fuel Monitoring Schedule
2. The provisions of the air construction permit AC49-203114 (PSD-FL-180), dated August 17, 1992 and the revisions to that permit, attached and listed above, are incorporated into this air construction permit.
3. Inlet foggers may be installed at the compressor inlet to each of the four simple cycle General Electric PG7111EA combustion turbine-electric generators. The four foggers may operate up to 7,000 hours per year in aggregate (average 1750 hours per unit per year).



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 12, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, CEP
Director Environmental Services
Florida Power Corporation
Post Office Box 14042, MAC BB1A
St. Petersburg, Florida 33733

Re: DEP File No. 0970014-002-AC (PSD-FL-180B)
Intercession City Plant Units 7-10
Inlet Foggers

PSD-FL-180H

Dear Mr. Pardue:

Enclosed is one copy of the Draft Permit and Technical Evaluation and Preliminary Determination, for the referenced project in Osceola County. The Department's Intent to Issue Air Construction Permit Modification and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION" are also included.

The "Public Notice of Intent to Issue Air Construction Permit Modification" must be published as soon as possible in a newspaper of general circulation in the area affected. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (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.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any questions, please call Mr. Linero at 850/921-9523.

Sincerely,

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

CHF/aal

Enclosures

In the Matter of an
Application for Permit by:

Mr. W. Jeffrey Pardue, CEP
Director Environmental Services
Florida Power Corporation
Post Office Box 14042, MAC BB1A
St. Petersburg, Florida 33733

DEP File No. 0970014-002-AC
Permit Modification No. PSD-FL-180(B)
Simple Cycle Peaking Units 7-10
Inlet Fögger Project
Osceola County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy of DRAFT Permit Modification attached) for the proposed project, detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Florida Power Corporation (FPC), applied on February 24, 1999 to the Department to add inlet foggers to four simple cycle combustion turbine-electrical generators (Units 7-10) the Intercession City Plant in Osceola County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit modification is required to conduct the work.

The Department intends to issue this air construction permit modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Construction Permit Modification." The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). The Department suggests that you publish the notice within thirty days of receipt of this letter. You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit or other authorization. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit Modification." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. 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, Mail Station # 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

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 INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION (including the PUBLIC NOTICE, Technical Evaluation and Preliminary Determination, and the DRAFT Permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3-12-99 to the person(s) listed:

W. Jeffrey Pardue, FPC*
Jennifer Tillman, P.E., FPC
Len Kozlov, DEP CD
Gregg Worley, EPA
John Bunyak, NPS

Clerk Stamp

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

Kumi Joken 3-12-99
(Clerk) (Date)

Z 333 618 083

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to: Jeff Pardue	
Street & Number: FPC	
Post Office, State, & ZIP Code: St. Pete FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	3-12-99
0970014-002-AC PSD-FI-180B	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jeffrey Pardue
FPC
PO Box 14042 MAC BB1A
St. Petersburg, FL
33733

4a. Article Number

2 333 618 083

4b. Service Type

- Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery

MAR 17 1999

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0970014-002-AC (PSD-FL-180B)

Florida Power Corporation Intercession City Plant
Units 7-10 Inlet Fogger Project
Osceola County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Florida Power Corporation (FPC). The permit is to install foggers at the compressor inlets of four 93-megawatt natural gas and No. 2 fuel oil-fired General Electric PG7111EA combustion turbine-electrical generators at the Intercession City Plant in Osceola County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are Florida Power Corporation, Post Office Box 14042, MAC BB1A, St. Petersburg, Florida 33733.

These units normally achieve their maximum rated output on cold days because the greater compressor inlet density allows greater throughput in the rotor or expansion section of the combustion turbine. The maximum power output is lower on hot days because of the lower compressor inlet density. The foggers increase hot-day power output by approximately 4-6 MW through evaporative cooling of the compressor inlet air although maximum output over all temperatures will remain 93 MW or below. The foggers provide no benefit on very humid or cold days and will not be used under those conditions. The result is that maximum hourly air pollution emissions will not increase although actual annual emissions will increase within their permitted limits because more fuel will be used on hot, relatively dry days.

Although the number of days during which the foggers can economically operate probably limits emissions increases to levels below significance for the purposes of PSD applicability, FPC proposes enforceable conditions to insure non-applicability. FPC asserts and the Department accepts that the modification will not cause any meaningful change in the hours of operation of these simple cycle peaking units. They are already limited to 3390 hours of operation per unit. The maximum increase in annual emissions caused by project in tons per year is summarized below along with the PSD-significant levels.

<u>Pollutants</u>	<u>Annual Emission Increase</u>	<u>PSD Significant Levels</u>
PM/PM ₁₀	3	25/15
SAM	3	7
SO ₂	40	40
NO _x	39	40
VOC	1	40
CO	11	100

An air quality impact analysis was not required or conducted. No significant impacts are expected to occur as a result of this project. It will not cause or contribute to a violation of any ambient air quality standard or increment.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit Modification." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

EX-104 12/20/07 10:41:11

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. 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, Mail Station # 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301

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

A complete project file 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
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555
Fax: 407/897-5963

The complete project file includes the application, technical evaluation, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. Applicant

Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33711

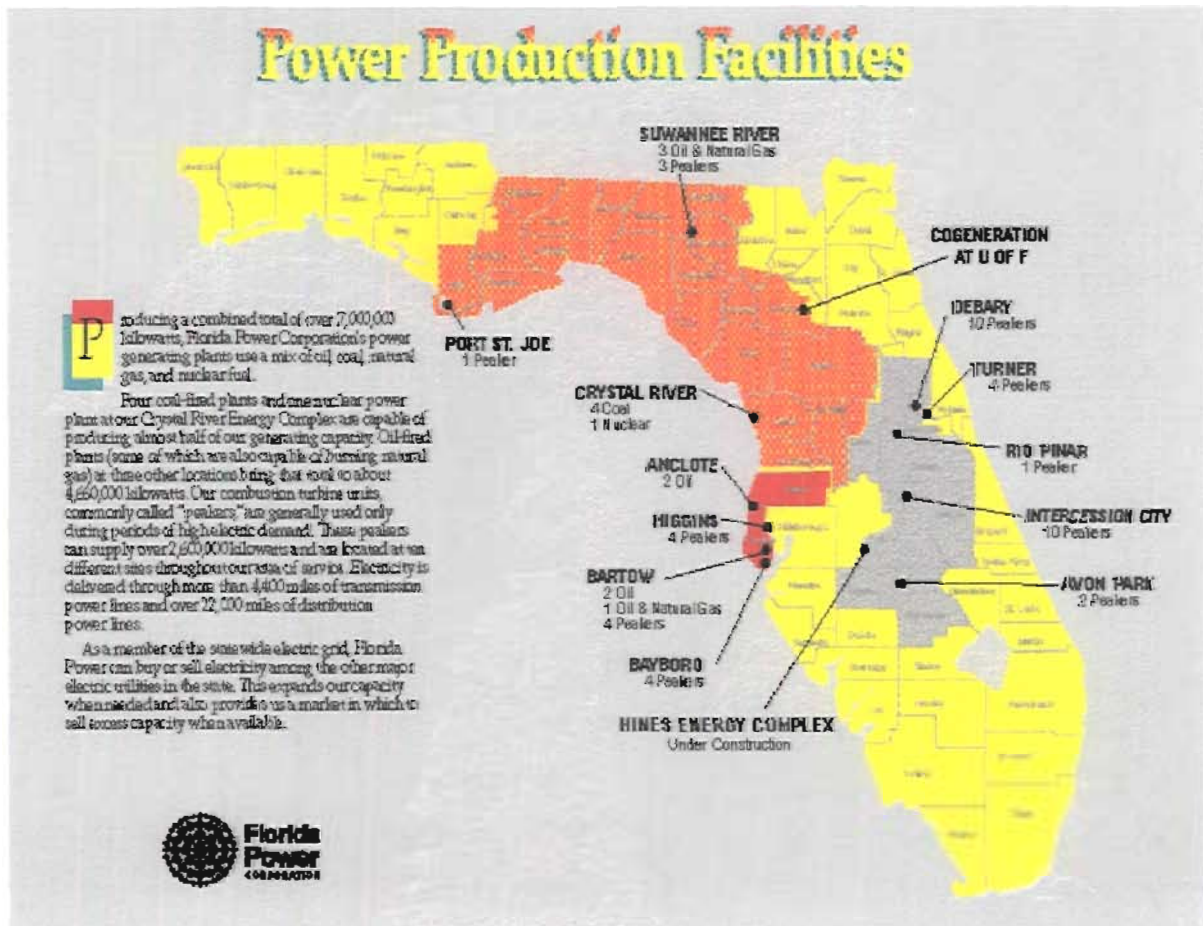
Authorized Representative: W. Jeffrey Pardue, CEP

2. Source Name and Location

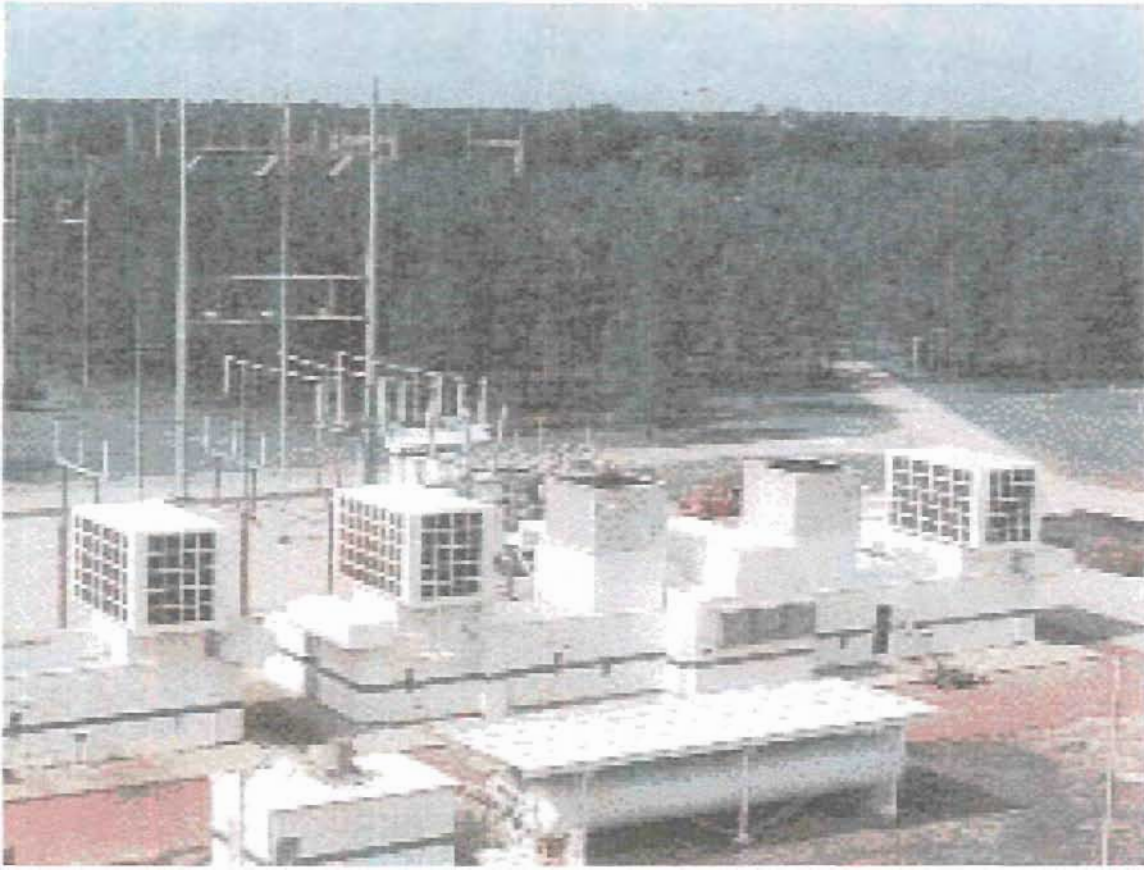
Intercession City Plant
Units P7, P8, P9, P10
Intercession City, Osceola County

UTM Coordinates: Zone 17, 446.3 km East and 3126 km North

The location of the Intercession City Plant within the FPC system is shown below followed by a photograph of the site downloaded from the FPC website:



TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION



3. Source Description

The Florida Power Corporation (FPC) Intercession City Plant consists of ten combustion turbine peaking units. Units Nos. P7, P8, P9, and P10 (designated collectively as Emission Unit 002) are each 92.9 megawatt simple cycle General Electric PG7111EA combustion turbine-electrical generators. The units are fired with pipeline natural gas or No. 2 fuel oil containing 0.2 percent (%) or less sulfur. Annual hours of operation per unit are limited to 3,390 or less based on a sliding scale related to the fuel sulfur content. Control measures and equipment consist of firing clean fuels, good combustion practices, and wet injection.

4. Current Permit and Major Regulatory Program Status

Construction of Units P7-P10 was authorized by the Department's Prevention of Significant Deterioration (PSD) Permit No. PSD-FL-180 and Air Construction Permit AC49-203114 issued in October 1993. Two other larger units were also authorized but only one was constructed. The four units along with six other units at the plant are operated under Title V Air Operation Permit No. 0970014-001-AV issued in January 1998.

The initial construction of Units P7-P10 (and P11) was authorized pursuant to the Department's Preconstruction Review and Permitting requirements in Rules 62-210 and 62-212, F.A.C. The units were also reviewed in accordance with the New Source Performance Standard (NSPS) Subpart GG - Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800, F.A.C.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

5. Permit Modification Request

On February 24, 1998 the Department received a request from FPC for modification of its permits to install inlet foggers at the compressor inlets of Units P7-P10. These units normally achieve their maximum rated output on cold days because the greater compressor inlet air density allows greater throughput in the rotor or expansion section of the combustion turbine. The maximum power output is lower on hot days because of the lower compressor inlet density. The foggers increase hot-day power output by approximately 4-6 MW through evaporative cooling of the compressor inlet air although maximum output over all temperatures will remain 93 MW or below. The foggers provide little or no benefit on humid or cold days and will not be used under those conditions.

Inlet foggers are routinely included in new combustion turbine projects and have not affected the Department's decisions regarding Best Available Control Technology.

6. Emissions Increases Due to Modification/Method of Operation

Because the main components of the units, including the compressors, combustors, rotors, fuel system, etc., will not be modified, it is arguable that the inlet foggers are not physical modification of the units. However the foggers are physical pieces of equipment whose addition and use can increase emissions on hot or dry days. The use of the foggers can also be considered a change in method of operation of the inlet "air conditioning system" that is already used to filter incoming air.

FPC estimated the maximum emissions increases by using the heat-input increase associated with a 20 degree F decrease in compressor inlet temperature. Using the heat input curve, a 20-degree F temperature decrease results in an increase in heat input of 60 mmBtu per hour. This value is multiplied by the emission rate in lb/mmBtu to obtain hourly emissions increases. The results are summarized below together with annual emission increase estimates, based on 1,750 hours of operation per fogger per year. The estimates are based on fuel oil firing and would be substantially less when firing natural gas.

TOTAL EMISSIONS INCREASES DUE TO USE OF INLET FOGGERS AT FOUR UNITS

Pollutant	Emission Rate lb/mmBtu	Emission Increase lb/hr	Annual Increase tons/yr	PSD Threshold tons/yr
NO _x	See Curve	11	39	40
PM/PM ₁₀	0.015	0.9	3	25/15
CO	0.05	3	11	100
VOC	0.004	0.2	1	40
SO ₂	0.19	11	40	40
SAM	0.016	1	3	7

The emissions increases calculated are the direct result from the modification or change in method of operation. These assume that the ability to achieve greater power output when the foggers are used does not result in the increased usage of the peaking units. The rationale is discussed below.

7. Evaluation of PSD Applicability

As a major source, a modification or change in method of operation of Units P7-P10 resulting in **significant net emissions increases** is subject to PSD review. Significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Significant Net Emissions Increase – A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates.

The significant emission rates are included (see PSD Threshold) in the Table above. The meaning of a net emissions increase is given in Rule 62-212.400, F.A.C. as:

Net Emissions Increase - A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.

The definition of actual emissions is given in Rule 62-210.200, F.A.C. (definitions) as follows:

Actual Emissions - The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

- (a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.*
- (b) The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that, for any regulated air pollutant, such unit-specific allowable emissions limits are federally enforceable.*
- (c) For any emissions unit (other than an electric utility steam-generating unit specified in subparagraph (d) of this definition) which has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.*

The term normal operations appears to be undefined and subject to some interpretation. Potential emissions are defined as follows:

Potential Emissions or Potential to Emit - The maximum capacity of an emission unit or facility to emit a pollutant under its physical and operational design. Any enforceable physical or operational limitation on the capacity of the emission unit or facility to emit a pollutant, including any air pollution control equipment and any restrictions on hours of operation or on the type or amount of material combusted, stored, or processed shall be treated as part of its design provided that, for any regulated air pollutant, such physical or operational limitation is federally enforceable.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Actual hours of operation since the start of operations are as follows:

Unit/Year	Annual Operating Hours 1993 - 1998					
	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
P-7	193	873	649	1125	1996	1927
P-8	222	724	562	1269	1974	1796
P-9	68	697	715	1177	2031	1981
P-10	155	579	512	1186	1893	2015

There has been a steady increase in annual hours of operation since these units were installed in 1993. During 1997 and 1998, these units were each utilized between 1,796 and 2031 hours per year or more than half of the 3,390 permitted hours of operation per unit per year.

Although recent hours of operation are well below the permitted limits, they are actually fairly high compared with the typically low levels of operation characteristic of peaking units. Among the reasons for the relatively high levels are the prolonged shutdown of the baseloaded Crystal River Nuclear Unit 3 in 1997, the very hot summer of 1998, and the recognized low electrical power reserve margin in the State.

If these peaking units were being entirely replaced by larger units, it would be clear that they have not begun normal operations. In such a case, a comparison of future to past actual emissions would be based on a comparison of potential emissions to past actual emissions. Such a comparison would undoubtedly result in a determination that PSD is applicable unless the company took an extreme limitation in hours of operation.

If a like-kind replacement was being made, the same comparison would also result in a determination that PSD is applicable. That particular case was addressed for the purposes of comparison to the specific case addressed in the Puerto Rican Cement Decision. This is the watershed Federal Circuit Court of Appeals decision that upheld the past actual-to-potential emission comparison applicable to (at least) modernization projects. The comments of interest for the purposes of the present review are as follows:

"One can imagine circumstances that might test the reasonableness of EPA's regulation. An electricity company, for example, might wish to replace a peak load generator -- one that operates only a few days per year -- with a new peak load generator that the firm could, but almost certainly will not, operate every day. And, uncertainties about the precise shape of future electricity peak demand might make the firm hesitate to promise EPA it will never increase actual emissions (particularly since EPA insists, as a condition of accepting the promise and issuing the NAD, that the firm also promise not to apply for permission for an actual increase under the PSD review process). Whatever the arguments about the "irrationality" of EPA's interpretation in such circumstances, however, those circumstances are not present here. The Company is not interested in peak load capacity; it operated its old kilns at low levels in the past; its new, more efficient kiln might give it the economic ability to increase production; consequently, EPA could plausibly fear an increase in actual emissions were it to provide the NAD. Thus, this seems the very type of case for which the regulations quoted above were written. We can find nothing arbitrary or irrational about EPA applying those regulations to the Company's proposal."

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The FPC inlet fogger project is yet another step removed from a modernization project than the like-kind replacement example. The units will not be replaced at all. The modification and its effects can be isolated and directly estimated. The Department believes that the peaking units have begun normal operation. The addition of the inlet foggers will not change that fact or cause an increase in hours of operation. The modification itself (i.e. installation and operation of the foggers), however, has not yet begun normal operation and its future actual emissions based on potential to emit should be initially estimated assuming usage of the units at full capacity during the permitted 3,390 hours per unit per year.

The number of days during which the foggers can economically operate probably limits actual emissions increases to levels below significance for the purposes of PSD applicability. However, FPC proposes to limit operation of the foggers to 1,750 hours per unit per year. This value is approximately equal to the recent historical hours of operation for the four peaking units. It is also a clear indication that compressor air inlet cooling will not cause the units to operate all of the permitted hours. Emissions will increase under these limitations (as previously tabulated) by levels less than the significant emissions rates. The Department concludes, therefore that PSD does not apply to this project.

8. Proposed Addition of New Conditions to Permit PSD-FL-180

The construction permit has expired for the Intercession City Project to construct Units P7 through P11. The Department will re-issue the permit incorporating all other previously approved revisions and modifications to-date and will add a further condition authorizing installation and operation of the inlet foggers.

The new condition applicable to the inlet foggers proposed for Units P7 through P10 are shown in the draft re-issued and modified permit. It limits operation of the inlet foggers to 1,750 hours per unit per year.

9. Conclusions

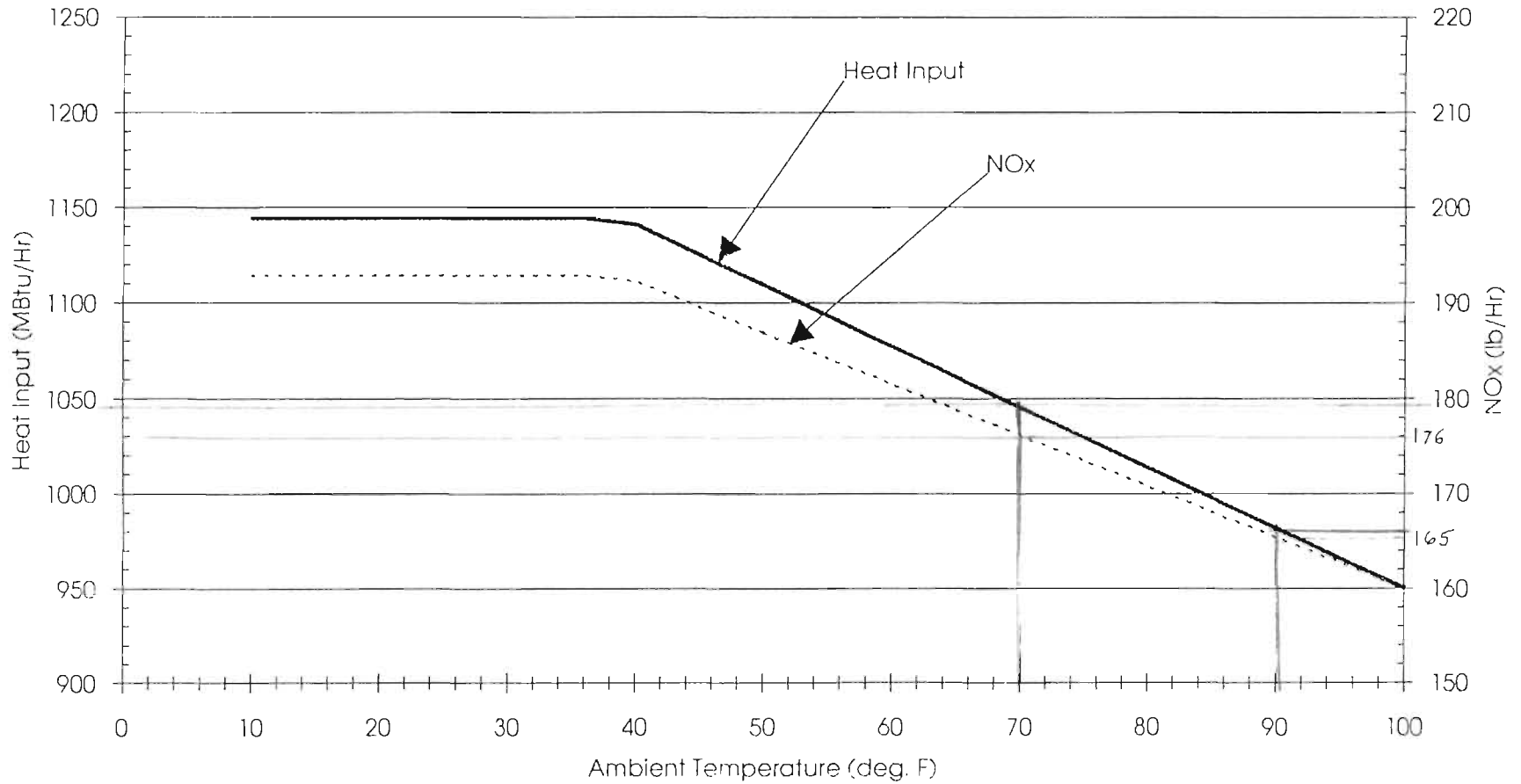
The changes authorized by this permit modification will not cause increases in hours of operation and will not result in significant net emissions increases. The project will not increase the maximum short-term emission rates as these are already achieved under natural conditions of low ambient temperatures without the use of the foggers.

The Department concludes that PSD is not applicable to this project. The changes will not cause a significant impact or cause or contribute to a violation of any ambient air quality standard or PSD increment.

The Department's conclusion does not set a precedent for projects implemented at any facilities other than simple cycle peaking units. It does not set precedents related to any physical changes within the compressors, combustors, rotors, or other key components at such units. The application and determination of the Department's rules does not constitute an interpretation of the EPA rules under 40CFR52.21, Prevention of Significant Deterioration or 40CFR60, New Source Performance Standards.

Florida Power Corporation

GE Frame 7EA Combustion Turbines



Note: Curves based on General Electric's (GE's) expected performance data.

6/10/94

PERMITTEE:

Florida Power Corporation
Post Office Box 14042 MAC BB1A
St. Petersburg, Florida 33733

DEP File No.	0970014-002-AC
Permit No.	PSD-FL-180B
Project	Peaking Unit Nos. 7-11
SIC No.	4911
Expires:	December 31, 1999

Authorized Representative:

W. Jeffrey Pardue, CEP
Director, Environmental Services

PROJECT AND LOCATION:

Re-issued and modified permit for the construction of five simple cycle combustion turbine-electrical generators (Peaking Units Nos. 7-11). This action also provides for installation of inlet foggers on the four 92.9 megawatt simple cycle General Electric PG7111EA combustion turbine-electrical generators (Peaking Units 7-10), collectively designated as Emission Unit No. 002. This permit includes a 171 MW Siemens V84.3 combustion turbine-electrical generator (Peaking Unit 11) designated as Emission Unit 003 that is unaffected by this action.

The units are located at the FPC Intercession City Plant, 6525 Osceola Polk County Line Road, Intercession City, Osceola County. Santa Rosa Energy Center and will be located within the boundary of the Sterling Fiber Chemical Plant in Pace, Santa Rosa, County. UTM coordinates are: Zone 17; 446.3 km E and 3126 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

ATTACHED APPENDICES MADE A PART OF THIS PERMIT:

- Appendix GC Construction Permit General Conditions
- Appendix SC Specific Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

APPENDIX SC
SPECIFIC CONDITIONS

1. This permit supersedes permit AC49-203114 (PSD-FL-180), dated August 17, 1992 to install six simple cycle combustion turbine-electrical generators and its revisions dated:
 - October 6, 1993 – Test and Compliance Methods. Steam in lieu of Water Injection
 - November 15, 1993 – Fuel Oil No. 2 in lieu of F, Hg, Pb, As, and Be Limits
 - July 15, 1994 – Substitute one 171 MW Siemens V84.3 for two 185.5 MW GE 7FA
 - September 21, 1994 – Manufacturer’s Heat Input to Ambient Temperature Curve
 - January 20, 1995 – Compliance Testing Requirements
 - August 10, 1995 – Natural Gas Use
 - December 15, 1997 – NSPS Custom Fuel Monitoring Schedule
2. The provisions of the air construction permit AC49-203114 (PSD-FL-180), dated August 17, 1992 and the revisions to that permit, attached and listed above, are incorporated into this air construction permit.
3. Inlet foggers may be installed at the compressor inlet to each of the four simple cycle General Electric PG7111EA combustion turbine-electric generators. The four foggers may operate up to 7,000 hours per year in aggregate (average 1750 hours per unit per year).

DRAFT 3/17/99

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This re-issued permit incorporates previous determinations for:
- a) Best Available Control Technology (X)
 - b) Prevention of Significant Deterioration (X); and
 - c) New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Florida Department of
Environmental Protection

Memorandum

TO: C. H. Fancy

FROM: Al Linero *aal 3/9*

DATE: March 9, 1999

SUBJECT: FPC Intercession City Inlet Fogger Project
DEP File No. 0970014-002-AC

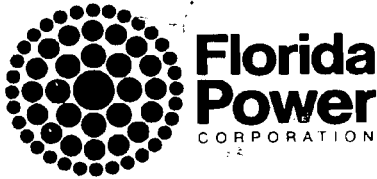
Attached is the draft public notice package including the Intent to Issue and the Technical Evaluation and Preliminary Determination for the inlet fogger project. The application is to install inlet foggers ahead of the compressor inlets of four simple cycle combustion turbines. The foggers will operate on hot days and days of relatively low humidity. The evaporative cooling effected by the foggers will allow the units to operate closer to their rated capacity.

Emissions will increase because the heat rate through the units will increase when the foggers are used and effectively cool the inlet air. FPC proposes to limit operation of the coolers to 1,800 hours per unit per year to insure PSD is not triggered by their use. The issue of making a future potential to past actual annual emission increase calculation is extensively addressed in the Technical Evaluation.

I recommend your signature and approval of the cover letter and Intent to Issue.

AAL/aal

Attachments



February 22, 1999

RECEIVED

FEB 24 1999

**BUREAU OF
AIR REGULATION**

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

Dear Mr. Linero:

Re: Inlet Fogging Permit Application

0970014-002-AC

Enclosed are three originals of a construction permit application for installation of inlet fogging systems on Units 7 through 10 at Florida Power Corporation's (FPC) Intercession City plant. As you know, FPC wishes to install inlet fogging systems on its newer peaking units at the two facilities in order to obtain additional electric output during summer peak demand periods.

FPC requests that the inlet fogging be permitted for use at the Intercession City facilities for a total of 7,200 hrs/year. Permitting the use of inlet fogging will help FPC address a very real need for additional generating capacity during the summer of 1999 with a corresponding insignificant increase in emissions. Please contact Mike Kennedy at (727) 826-4334 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Jeffrey Pardue", written in a cursive style.

W. Jeffrey Pardue, C.E.P.
Director

*CC: file
Central District*

RECEIVED

FEB 24 1999

Department of
Environmental Protection

BUREAU OF
AIR REGULATION

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

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Florida Power Corporation	
2. Site Name : Intercession City Plant	
3. Facility Identification Number : 0970014	<input type="checkbox"/> Unknown
4. Facility Location : Intercession City Street Address or Other Locator : 6525 Osceola Polk Co. Line Rd. City : Intercession City County : Osceola Zip Code : 33848	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

0970014-002-AC

I. Part 1 - 1

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

Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

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

Name : W. Jeffrey Pardue, C.E.P.
Title : Director, Environmental Services

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

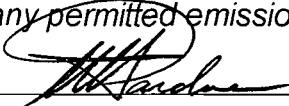
Organization/Firm : Florida Power Corporation
Street Address : P.O. Box 14042, MAC BB1A
City : St. Petersburg
State : FL Zip Code : 33733

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

Telephone : (727)826-4301 Fax : (727)826-4216

4. Owner/Authorized Representative or Responsible Official Statement :

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



Signature

2/23/99

Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
002	Combustion Turbine (CT) Peaking Unit Nos. 7-10	

Purpose of Application and Category

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

This 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 :

] 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.

Operation permit to be revised/corrected :

-] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

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

This 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.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This 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).

I. Part 4 - 2

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

Effective : 3-21-96

Current operation permit number(s), if any :
0970014-001-AV

- 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) :

- Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

Attached - Amount : \$0.00 Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :	
Project to add inlet fogging to each of Units 7 through 10. Fogging consists of atomized water to cool the inlet air to the turbine, producing additional electric generation output.	
2. Projected or Actual Date of Commencement of Construction :	01-May-1999
3. Projected Date of Completion of Construction :	30-Jun-1999

Professional Engineer Certification

1. Professional Engineer Name : Jennifer L. Tillman Registration Number : 0052125	
2. Professional Engineer Mailing Address : Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733	
3. Professional Engineer Telephone Numbers : Telephone : (727)826-4132 Fax : (727)826-4216	

4. Professional Engineer Statement :

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

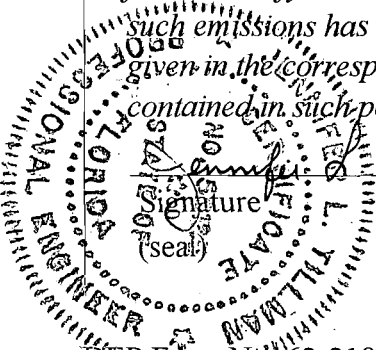
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

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



L. Tillman _____

_____ *2/22/99* _____
Date

* Attach any exception to certification statement.

I. Part 6 - 2

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

Effective : 3-21-96

Application Contact

1. Name and Title of Application Contact :

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

2. Application Contact Mailing Address :

Organization/Firm : Florida Power Corporation
Street Address : P.O. Box 14042, MAC BB1A
City : St. Petersburg
State : FL Zip Code : 33733

3. Application Contact Telephone Numbers :

Telephone : (727)826-4334 Fax : (727)826-4216

Application Comment

This application is for a permit to authorize the installation of inlet fogging on Intercession City Units 7 through 10.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

2

1. Facility UTM Coordinates : Zone : 17 East (km) : 446.30 North (km) : 3126.00			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 28 15 38 Longitude (DD/MM/SS) : 81 32 51			
3. Governmental Facility Code : 0	4. Facility Status Code : A	5. Facility Major Group SIC Code : 49	6. Facility SIC(s) :
7. Facility Comment : Facility consists of 11 combustion turbine peaking units. Six CTs are fired with #2 distillate oil with a maximum sulfur content of 0.5%. Five CTs are fired with #2 distillate oil with a maximum sulfur content of 0.2% or natural gas. These 5 CTs are limited to average annual capacity factor of 33% based on weighted 12-month rolling average sulfur content of 0.2%, which may be increased up to 38.7% if average sulfur content is 0.16% or less.			

Facility Contact

1. Name and Title of Facility Contact : M. J. Drango Asset Manager
2. Facility Contact Mailing Address : Organization/Firm : Florida Power Corporation Street Address : 6525 Osceola Polk Co. Line Rd. City : Intercession City State : FL Zip Code : 33848
3. Facility Contact Telephone Numbers : Telephone : (407)396-2111 Fax : (407)678-4453

II. Part 1 - 1

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

Effective : 3-21-96

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	N
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	N
10. Title V Source by EPA Designation?	N
11. Facility Regulatory Classifications Comment :	
Combustion Turbine Units 7 through 10, to which this application applies, are subject to NSPS for stationary gas turbines (40 CFR Part 60, Subpart GG).	

B. FACILITY REGULATIONS

Rule Applicability Analysis

Not Applicable

B. FACILITY REGULATIONS

List of Applicable Regulations

Refer to Attachment IC-FE-B

II. Part 3b - 1

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

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
PM10	A
NOX	A
PM	A
CO	A
SO2	A
VOC	A
SAM	A

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 1

1. Pollutant Emitted : PM10

2. Requested Emissions Cap :

(lbs/hour)

(tons/year)

3. Basis for Emissions Cap Code :

4. Facility Pollutant Comment :

II. Part 4b - 1

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

Effective : 3-21-96

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 3

1. Pollutant Emitted : PM

2. Requested Emissions Cap :

(lbs/hour)

(tons/year)

3. Basis for Emissions Cap Code :

4. Facility Pollutant Comment :

II. Part 4b - 3

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

Effective : 3-21-96

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 4

1. Pollutant Emitted : CO

2. Requested Emissions Cap :
(lbs/hour) (tons/year)

3. Basis for Emissions Cap Code :

4. Facility Pollutant Comment :

II. Part 4b - 4

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

Effective : 3-21-96

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 5

1. Pollutant Emitted :	SO2	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :		

II. Part 4b - 5

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 6

1. Pollutant Emitted :	VOC	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :		

II. Part 4b - 6

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

Effective : 3-21-96

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 7

1. Pollutant Emitted :	SAM	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :		

II. Part 4b - 7

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	IC-FE-1
2. Facility Plot Plan :	IC-FE-2
3. Process Flow Diagram(s) :	IC-FE-3
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Applica	IC-FE-4

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt
8. List of Equipment/Activities Regulated under
9. Alternative Methods of Operation :
10. Alternative Modes of Operation (Emissions
11. Identification of Additional Applicable
12. Compliance Assurance Monitoring
13. Risk Management Plan Verification :
14. Compliance Report and Plan :
15. Compliance Certification (Hard-copy Requir

II. Part 5 - 2

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

Effective : 3-21-96

ATTACHMENT IC-FE-B
FACILITY REGULATIONS

ATTACHMENT IC-FE-B
FACILITY REGULATIONS

Applicable Requirements Listing - Power Plants

FACILITY: FPC Intercession City Plant

FDEP Rules:

General Permits:

- 62-4.030
- 62-4.040(1)(a) - Exemptions from permitting
- 62-4.040(1)(b) - Exemptions from permitting
- 62-4.100
- 62-4.130

Asbestos NESHAP:

- 62-204.800(8)(b)8.(State Only) - Asbestos Removal
- 62-204.800(8)(d) (State Only) - General Provisions (Asbestos)
- 62-204.800(19) (State Only) - CFCs; Part 82

Stationary Sources-General:

62-210.300(2)

Exemptions - Plant Specific:

- 62-210.300(3)(a)4. - comfort heating < 1 mmBtu/hr
- 62-210.300(3)(a)5. - mobile sources
- 62-210.300(3)(a)7. - non-industrial vacuum cleaning
- 62-210.300(3)(a)8. - refrigeration equipment
- 62-210.300(3)(a)9. - vacuum pumps for labs
- 62-210.300(3)(a)10. - steam cleaning equipment
- 62-210.300(3)(a)11. - sanders < 5 ft²
- 62-210.300(3)(a)12. - space heating equip.; (non-boilers)
- 62-210.300(3)(a)14. - bakery ovens
- 62-210.300(3)(a)15. - lab equipment
- 62-210.300(3)(a)16. - brazing, soldering or welding
- 62-210.300(3)(a)17. - laundry dryers
- 62-210.300(3)(a)20. - emergency generators < 32,000 gal/yr
- 62-210.300(3)(a)21. - general purpose engines < 32,000 gal.yr
- 62-210.300(3)(a)22. - fire and safety equipment
- 62-210.300(3)(a)23. - surface coating > 5% VOC; 6 gal/month
- 62-210.300(3)(a)24. - surface coating < 5% VOC
- 62-210.300(3)(b) - Temporary Exemptions
- 62-210.370(3) - AORs
- 62-210.900(5) - AOR Form

Title V Permits:

- 62-213.205(1)(a) - Fees
- 62-213.205(1)(b)
- 62-213.205(1)(c)
- 62-213.205(1)(e)
- 62-213.205(1)(f)
- 62-213.205(1)(g)
- 62-213.205(1)(I)
- 62-213.205(1)(j)
- 62-213.400 - Permits/Revisions
- 62-213.410 - Changes without permit revisions
- 62-213.420.(1)(b)2. - Permits-allows continued operation
- 62-213.420.(1)(b)3. - Permits-additional information
- 62-213.460 - Permit Shield
- 62-213.900(1) - Fee Form

Open Burning:

- 62-256.300 - Prohibitions
- 62-256.700 - Open burning Allowed

Asbestos Removal:

- 62-257.301 - Notification and Fee
- 62-257.400 - Fee Schedule
- 62-257.900 - Form

Stationary Sources-Emission Standards:

- 62-296.320(2) (State Only) - Odor
- 62-296.320(3)(b) (State Only) - Emergency Open Burning
- 62-296.320(4)(b) - General VE Standard
- 62-296.320(4)(c) - Unconfined Emissions of Particulate Matter

Stationary Sources-Emission Monitoring

- 62-297.310(7)(a)10. - Exemption of annual VE for 210.300(3)(a) sources/Gen. Per.

Federal Regulations:

Asbestos Removal:

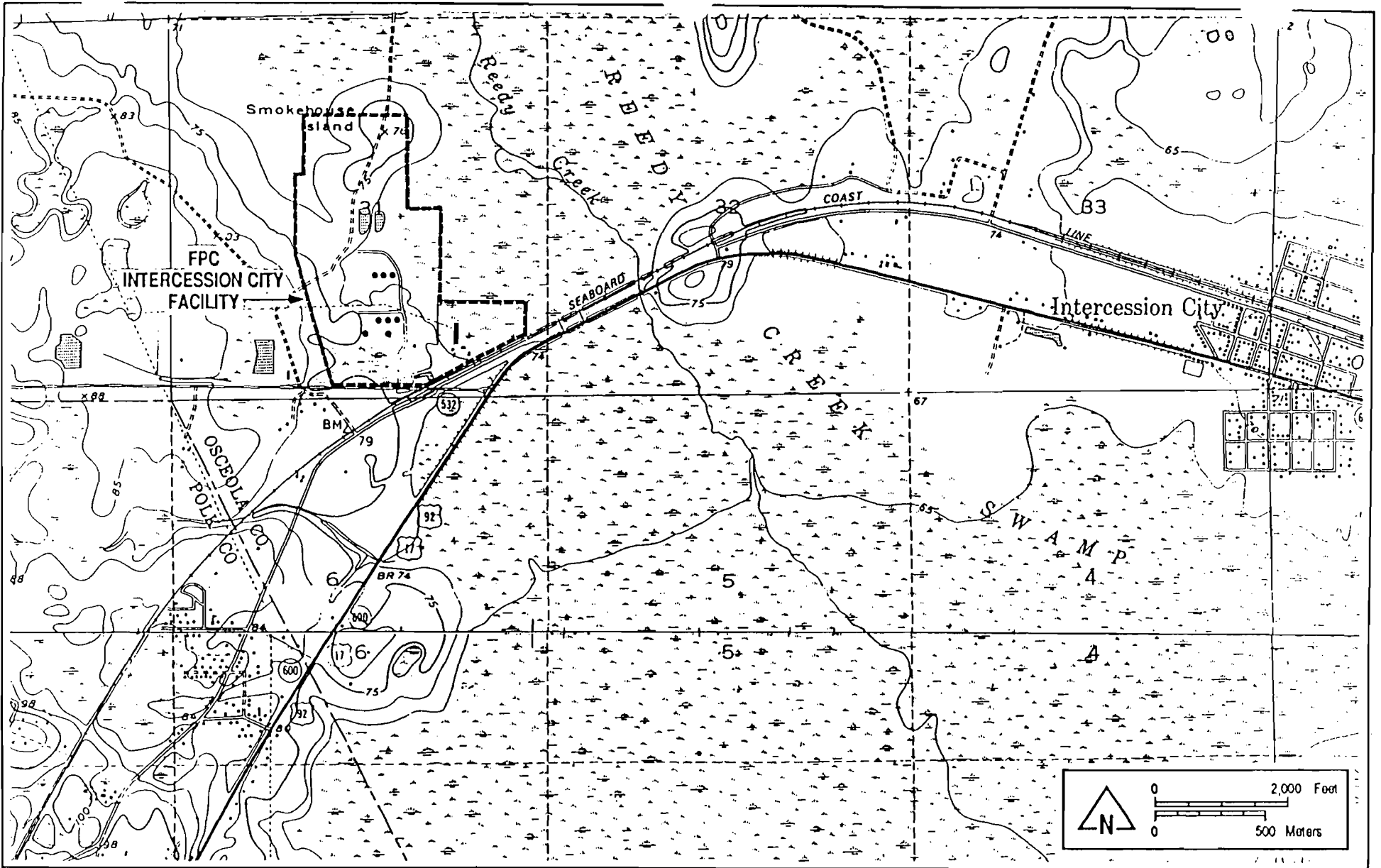
- 40 CFR 61.05 - Prohibited Activities
- 40 CFR 61.12(b) - Compliance with work practice standard
- 40 CFR 61.14 - Monitoring Requirements (if required)
- 40 CFR 61.19 - Circumvention
- 40 CFR 61.145 - Demolition and Renovation
- 40 CFR 61.148 - Standard for Insulating Material

CFCs > 50 lb:

- 40 CFR 82.166(k) - Service Documentation
- 40 CFR 82.166(m) - Recordkeeping

ATTACHMENT IC-FE-1

AREA MAP



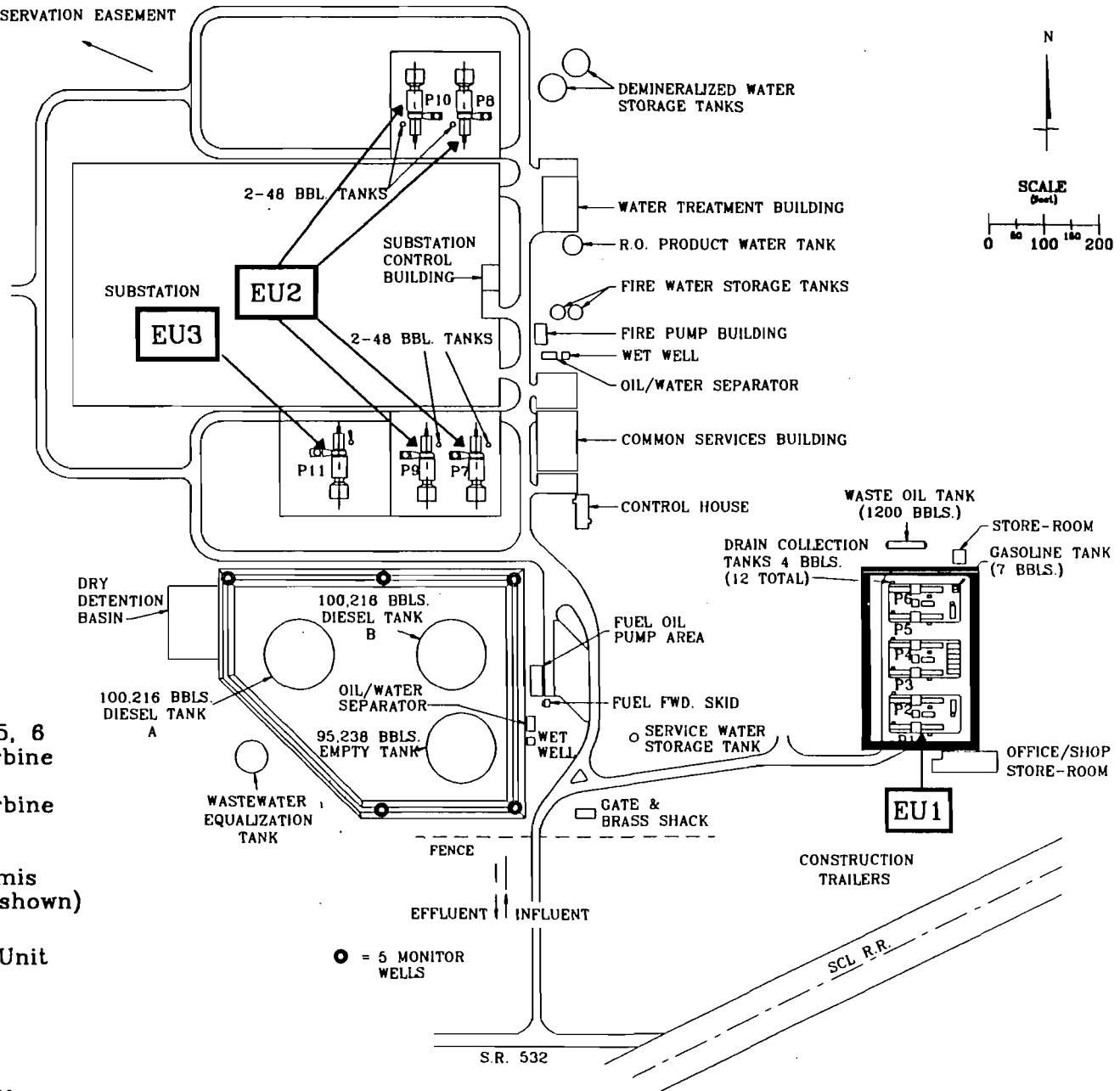
LOCATION OF THE FPC INTERCESSION CITY FACILITY



ATTACHMENT IC-FE-2

FACILITY PLOT PLAN

NORTHWEST CORNER- CONSERVATION EASEMENT

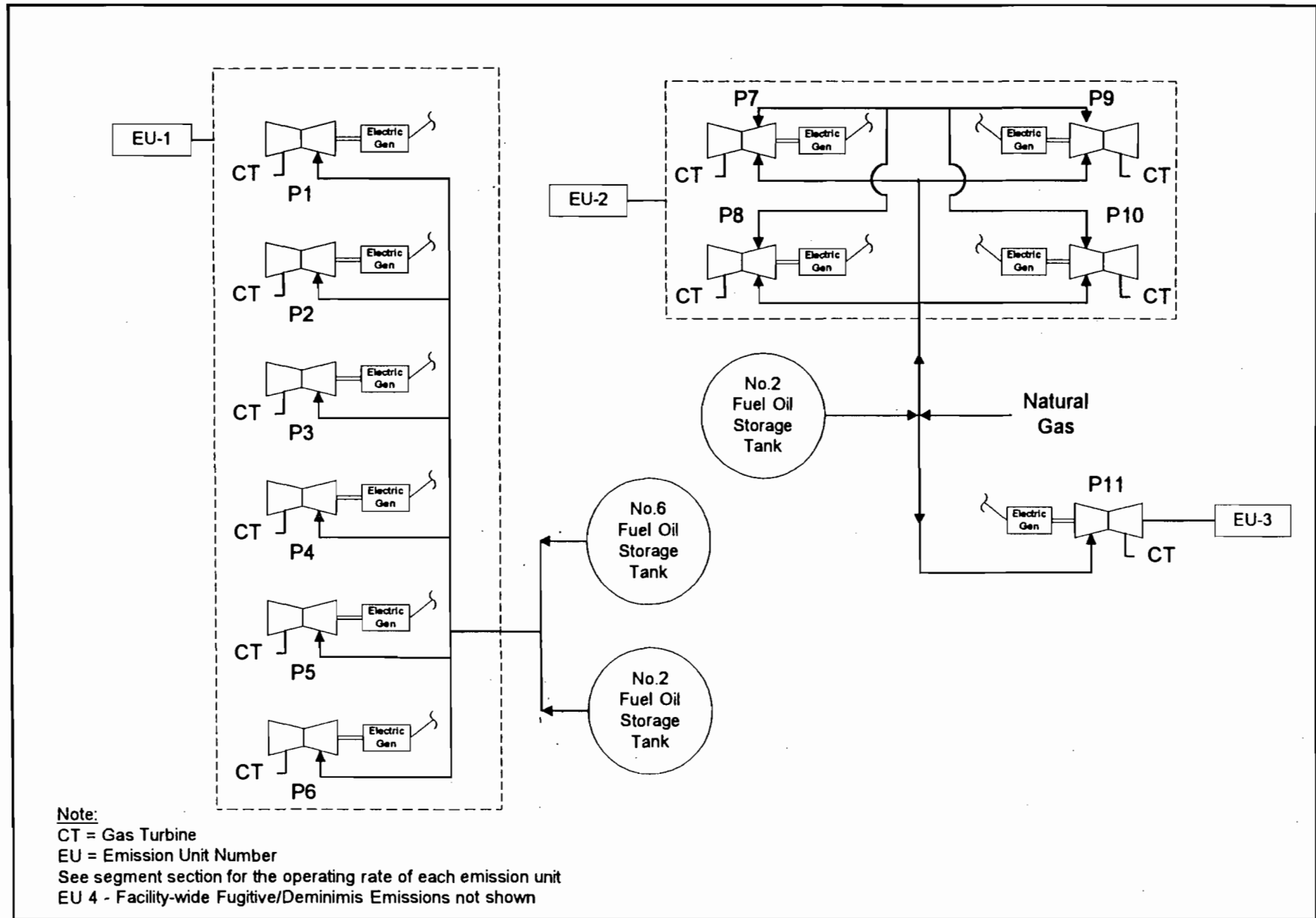



Key

- EU1 - Gas Turbine
No. 1, 2, 3, 4, 5, 6
- EU2 - Combustion Turbine
No. 7, 8, 9, 10
- EU3 - Combustion Turbine
No. 11
- EU4 - Facility-wide
Fugitive/Deminimis
Emissions (not shown)

Note: EU = Emission Unit

ATTACHMENT IC-FE-3
PROCESS FLOW DIAGRAM



Florida Power Corporation		Emission Unit: Significant Units	 KBN Engineering and Applied Sciences, Inc.
		Process Area: Overall Plant	
Emission Units		Intercession City	
		Latest Revision Date: 6/3/96 03:45 PM	

Attachment IC-FE-4
Supplemental Information

Florida Power Corporation

GE Frame 7EA Combustion Turbines

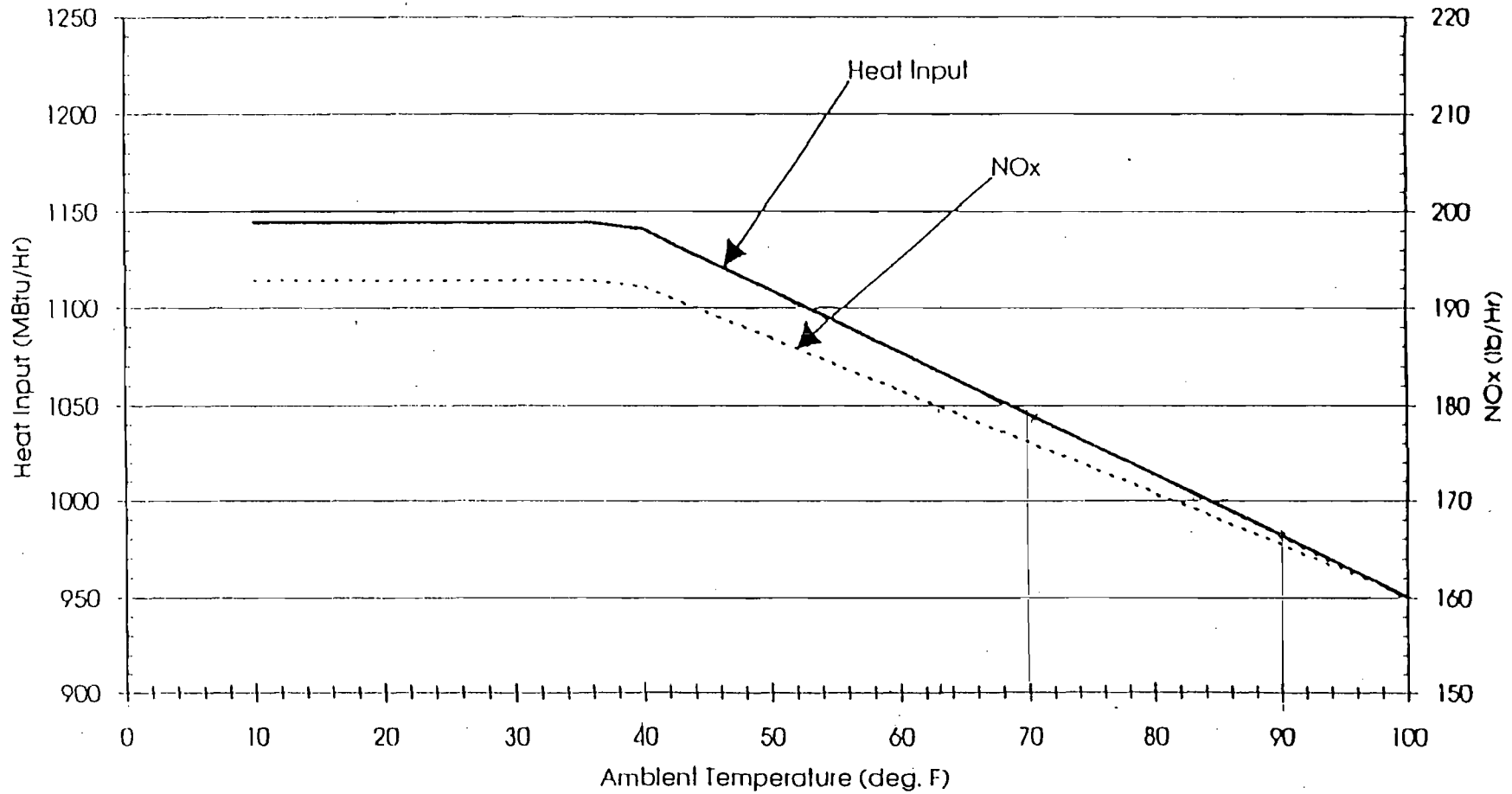


Figure II
Florida Power Corporation
Intercession City Facility
Heat Input vs. Ambient Temperature Curve

Description of Project and Estimated Emissions Increase

The inlet fogging system is useful on hot summer days. A water mist is sprayed into the inlet of the combustion turbine. The mist cools the inlet air by evaporation, resulting in a 20 degrees F. reduction in temperature. The air is therefore denser, and the unit can achieve higher output (nominally, 4 to 6 MW of additional output will be obtained). This also results in slightly higher heat input and NOx emissions, although they are within the allowable limits for the inlet temperature achieved. In addition, the fogging system improves unit efficiency slightly. Efficiency is expected to increase by approximately 1% as a result of the fogging. This will have a nominal offsetting effect on the direct increase in emissions resulting from the use of inlet fogging.

The attached curves, which are a part of the current permit for the facility, show the relationship between inlet temperature and heat input and NOx emissions for the GE Frame 7EA combustion turbines at Intercession City. These curves do not take into account the improved efficiency achieved with inlet fogging, so they are conservative.

A typical scenario would occur when the ambient temperature is 90 degrees F. If fogging is used, the inlet air to the combustion turbine would be cooled to approximately 70 deg. NOx emissions could increase from 165 lbs/hr to 176 lbs/hr, which is an increase of 11 lbs/hr per unit. This is a worst-case estimate, because it is based on oil firing. The increase would be only 6 lbs/hr while operating on natural gas. At an increase of 11 lbs/hr, inlet fogging could be used for an aggregate of over 7,200 hrs/year and remain below the PSD significant emissions increase threshold of 40 tons/year. Given the long, hot summers in Florida, limiting the use of the fogging systems to an aggregate total of 7,200 hrs/year per facility should provide adequate operating time while ensuring that emissions do not increase significantly.

For other criteria pollutants, the emissions increase can be estimated by using the heat input increase associated with a 20 deg. F decrease in temperature. Using the heat input curve, a 20 deg. F temperature decrease results in an increase in heat input of 55 mmBtu/hour. This is then multiplied by the emissions rate in lb/mmBtu in order to obtain the increase in hourly emissions. The following table summarizes the results.

Pollutant	Emission Rate (lb/mmBtu)	Emission Increase (lb/hr)	Tons/Year @ 7,200 hr/yr	PSD Threshold
SO ₂	0.19	10.5	37.8	40
PM	0.015	0.8	2.9	25
PM10	0.015	0.8	2.9	15
CO	0.05	2.8	10.1	100
VOC	0.004	0.2	11.0	40
SAM	0.016	0.9	2.9	7

All pollutant increases will remain less than the respective PSD thresholds at an aggregate fogging use limit of 7,200 hours per year for Units 7 through 10.

Unit Hours of Operation

Total annual hours of operation for Units 7 through 10 for 1997 and 1998 are as follows.

Unit	1997 Hours	1998 Hours
7	1,996	1,927
8	1,974	1,796
9	2,031	1,981
10	1,893	2,015

Units 7 through 10 will continue to be used as peaking units after the installation of inlet fogging.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- [X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- [] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

- [] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 1

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

Effective : 3-21-96

Emissions Unit Information Section 1

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Combustion Turbine (CT) Peaking Unit Nos. 7-10		
2. Emissions Unit Identification Number : 002 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment :		

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Emissions Unit Control Equipment 1

1. Description : Water Injection
2. Control Device or Method Code :

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

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Emissions Unit Details

1. Initial Startup Date :	19-Aug-1993	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :	General Electric	Model Number : PG 7111EA
4. Generator Nameplate Rating :	93 MW	
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	1144 mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr tons/day
3. Maximum Process or Throughput Rate :	
4. Maximum Production Rate :	
5. Operating Capacity Comment :	See Attachment IC-EU2-C5

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	3,390 hours/year

**D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Rule Applicability Analysis

Not Applicable

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

List of Applicable Regulations

See Attachment IC-EU2-D

III. Part 6b - 1

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

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	See Attach. IC-FE-2
2. Emission Point Type Code :	1
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point)	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Combustion turbine gases exhaust through a single stack per turbine.	
5. Discharge Type Code :	V
6. Stack Height :	50 feet
7. Exit Diameter :	13.8 feet
8. Exit Temperature :	1043 °F
9. Actual Volumetric Flow Rate :	1551317 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates :	
Zone : 0	East (km) : 0.000
	North (km) : 0.000

III. Part 7a - 1

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

Effective : 3-21-96

14. Emission Point Comment :

Exit temperature and flow rate given for a single CT at an ambient temperature of 59 deg. F (oil firing).

III. Part 7a - 2

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Distillate fuel oil.	
2. Source Classification Code (SCC) : 20100101	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 8.70	5. Maximum Annual Rate : 26,523.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 0.2	8. Maximum Percent Ash : 0.10
9. Million Btu per SCC Unit : 132	
10. Segment Comment :	

III. Part 8 - 1

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Natural gas	
2. Source Classification Code (SCC) : 20100201	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 1.05	5. Maximum Annual Rate : 3,553.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment : Maximum % sulfur: 1 grain/100 cf. 1) Max. hourly and annual rates at 59 deg. F for one CT. Annual rate based on 3390 hours. However, permitted rate is actually an aggregate of all four units. 2)	

III. Part 8 - 2

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

Effective : 3-21-96

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

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - SO ₂			EL
2 - NO _X	028		EL
3 - PM			EL
4 - PM ₁₀			EL
5 - CO			EL
6 - VOC			EL
7 - SAM			EL

III. Part 9a - 1

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : SO2		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
222.0000000	lb/hour	321.0000000 tons/year
4. Synthetically Limited?		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor 0.2 Units % S		
Reference AC permit limit		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Oil-firing at 59 deg. F. AC permit limit. Equivalent TPY for single CT; four CTs have an aggregate limit of 1,283 TPY.		
9. Pollutant Potential/Estimated Emissions Comment :		
Max. hourly emissions based on ambient temp. at 59 deg. F. Annual emissions based on 59 deg. and 33% capacity factor.		

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

III. Part 9b - 2

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

Effective : 3-21-96

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control :	80.00	%
3. Potential Emissions :	182.0000000 lb/hour	308.5000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right;">to tons/year</div>		
6. Emissions Factor	42	Units ppmvd@15% O2
Reference	Permit limit	
7. Emissions Method Code : 0		
8. Calculations of Emissions : Oil-firing at 59 deg. F. AC permit limit. Equivalent TPY for 1 CT; 4 CTs have aggregate limit of 1,232 TPY.		
9. Pollutant Potential/Estimated Emissions Comment : Max. hourly emissions based on ambient temp. at 59 deg. F. Annual emissions based on 59 deg. and 38.7% capacity factor.		

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

III. Part 9b - 4

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

Effective : 3-21-96

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
15.0000000 lb/hour		25.4000000 tons/year
4. Synthetically Limited?		
[] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor	15	Units lb/hr
Reference AC permit limit		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Oil-firing at 59 deg. F. AC permit limit. Equivalent TPY for 1 CT; 4CTs have aggregate limit of 102 TPY.		
9. Pollutant Potential/Estimated Emissions Comment :		
Max. hourly emissions based on ambient temp. at 59 deg. F. Annual emissions based on 59 deg. and 38.7% capacity factor.		

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

III. Part 9b - 6

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

Effective : 3-21-96

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : PM10	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	
15.0000000 lb/hour	25.4000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	
to	tons/year
6. Emissions Factor 15	Units lb/hr
Reference AC permit limit	
7. Emissions Method Code : 0	
8. Calculations of Emissions :	
Oil-firing at 59 deg. F. AC permit limit. Equivalent TPY for single CT; 4 CTs have an aggregate limit of 102 TPY.	
9. Pollutant Potential/Estimated Emissions Comment :	
Max. hourly emissions based on ambient temp. at 59 deg. F. Annual emissions based on 59 deg. F and 38.7% capacity factor.	

III. Part 9b - 7

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

Effective : 3-21-96

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

III. Part 9b - 8

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

Effective : 3-21-96

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : CO		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
54.0000000 lb/hour	91.5000000 tons/year	
4. Synthetically Limited?		
[] Yes	[X] No	
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor	25	Units ppmvd
Reference AC permit limit		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Oil-firing @ 59 deg. F. AC permit limit. Equivalent TPY for 1 CT; 4 CTs limited to 366 TPY.		
9. Pollutant Potential/Estimated Emissions Comment :		
Max. hourly emissions based on ambient temp. @ 59 deg. F. Annual emissions based on 59 deg. F. and 38.7% capacity factor.		

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

III. Part 9b - 10

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

Effective : 3-21-96

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : VOC	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	
5.0000000 lb/hour	8.5000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor 5 Reference AC permit limit	Units ppmvd
7. Emissions Method Code : 0	
8. Calculations of Emissions :	
Oil-firing @ 59 deg. F. AC permit limit. Equivalent TPY for 1 CT; 4 CTs limited to an aggregate of 34 TPY.	
9. Pollutant Potential/Estimated Emissions Comment :	
Max. hourly emissions based on ambient temp. @ 59 deg. F. Annual emissions based on 59 deg. F and 38.7% capacity factor.	

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

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

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : SAM	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	
18.0000000 lb/hour	26.5000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	
	to tons/year
6. Emissions Factor 0.2	Units % S
Reference Permit limit	
7. Emissions Method Code : 0	
8. Calculations of Emissions :	
Oil-firing at 59 deg. F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 106 TPY.	
9. Pollutant Potential/Estimated Emissions Comment :	
Max. hourly emissions based on ambient temp. at 50 deg. F. Annual emissions based on 59 deg. and 33% capacity factor.	

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	0.20	% S max.	
4. Equivalent Allowable Emissions :	222.00	lb/hour	321.00 tons/year
5. Method of Compliance :	Fuel analysis		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - oil firing at 59 deg. F. No applicable ann. emiss. limit for single CT; 4 CTs have aggregate limit of 1,283 TPY. 33% cap. fact. limit @ 0.2 %S, 38.7% @ 0.16 %S.		

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 1

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	1.00	grain S/100 CF	
4. Equivalent Allowable Emissions :	2.99	lb/hour	5.06 tons/year
5. Method of Compliance :	Fuel analysis		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - natural gas firing at 59 deg. F. No annual emissions limit applicable for 1 CT; 4 CTs have aggregate limit of 20.2 TPY.		

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	42.00	ppmvd@15% O2	
4. Equivalent Allowable Emissions :	182.00	lb/hour	308.50 tons/year
5. Method of Compliance :	Annual compliance test, EPA Method 20		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - oil firing. No applicable annual emission limit for 1 CT; 4 CTs have a limit of 1,232 TPY @ 38.7% capacity factor.		

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 2

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	25.00	ppmvd@15% O2	
4. Equivalent Allowable Emissions :	107.00	lb/hour	181.40 tons/year
5. Method of Compliance :	Annual compliance test, EPA Method 20		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit- natural gas-firing at 59 deg. F.. No applicable annual emission limit for 1 CT; 4 CTs have a limit of 725 TPY @ 38.7% capacity factor.		

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	15.00	lb/hr	
4. Equivalent Allowable Emissions :	15.00	lb/hour	25.40 tons/year
5. Method of Compliance :	Annual compliance test, EPA Mthd 5 or VE < 10% at full load		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - oil-firing at 59 deg. F. No applicable annual emission limit for a single CT; 4 CTs have a limit of 102 TPY at a 38.7% capacity factor.		

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 3

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	7.50	lb/hr		
4. Equivalent Allowable Emissions :	7.50	lb/hour	12.71	tons/year
5. Method of Compliance :	VE, EPA Method 9			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	If VE < 10%, stack test not required. Permit limit - nat. gas-firing @ 59 deg. F. No applicable annual emissions limit for 1 CT; 4 CTs limited to 50.8 TPY @ 38.7% cap. fact.			

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	15.00	lb/hr	
4. Equivalent Allowable Emissions :	15.00	lb/hour	25.40 tons/year
5. Method of Compliance :	VE, EPA Method 9		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	If VE < 10%, stack test not required. AC permit limit - oil-firing @ 59 deg. F. No applicable annual emission limit for 1 CT; 4 CTs limited to 102 TPY.		

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 4

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	7.50	lb/hr		
4. Equivalent Allowable Emissions :	7.50	lb/hour	12.71	tons/year
5. Method of Compliance :	VE, EPA Method 9			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	If VE < 10%, stack test not required. AC permit limit - natural gas-firing @ 59 deg. F. No applicable annual emissions limit for 1 CT; 4 CTs limited to 50.8 TPY.			

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	25.00	ppm	
4. Equivalent Allowable Emissions :	54.00	lb/hour	91.50 tons/year
5. Method of Compliance :	Annual compliance test, EPA Method 10		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - oil-firing @ 59 deg. F. No applicable annual emissions limit for 1 CT; 4 CTs limited to 366 TPY.		

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 5

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	10.00	ppmvd	
4. Equivalent Allowable Emissions :	21.30	lb/hour	36.10 tons/year
5. Method of Compliance :	Annual compliance test, EPA Method 10		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - natural gas-firing @ 59 deg. F. No applicable annual limit for 1 CT; 4 CTs limited to 144.4 TPY.		

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	5.00	lb/hr		
4. Equivalent Allowable Emissions :	5.00	lb/hour	8.50	tons/year
5. Method of Compliance :	Annual test, EPA Method 25A. Test not req'd if CO met.			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - oil-firing @ 59 deg. F. No applicable annual emission limit for 1 CT; 4 CTs limited to aggregate of 34 TPY. VOC test not req'd if CO limit met.			

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 6

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	3.00		lb/hr	
4. Equivalent Allowable Emissions :	3.00	lb/hour	5.08	tons/year
5. Method of Compliance :	Annual test, EPA Method 25A. Test not req'd if CO met.			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - natural gas-firing @ 59 deg. F. No applicable annual emission limit for 1 CT; 4 CTs limited to 20.3 TPY. VOC test not req'd if CO limit met.			

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	0.20	% S	
4. Equivalent Allowable Emissions :	18.00	lb/hour	26.50 tons/year
5. Method of Compliance :	Annual test (EPA Method 8) or fuel sulfur content		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - oil firing. No annual emiss. limit for 1 CT; 4 CTs have limit of 106 TPY. If S content met, SAM test not req'd. 33% cap. fact., 38.7% if S content 0.16% or less.		

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Pollutant Information Section 7

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	0.44	lb/hr	
4. Equivalent Allowable Emissions :	0.44	lb/hour	0.75 tons/year
5. Method of Compliance :	Annual test, EPA Method 8. Test not req'd if S content met.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	AC permit limit - natural gas-firing @ 59 deg. F. No applicable annual emission limit for 1 CT; 4 CTs limited to 3.0 TPY. SAM test not req'd if sulfur content limit met.		

**I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Information Section 1
 Combustion Turbine (CT) Peaking Unit Nos. 7-10

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10									
2. Basis for Allowable Opacity :	OTHER									
3. Requested Allowable Opacity :	<table> <tr> <td>Normal Conditions :</td> <td>10</td> <td>%</td> </tr> <tr> <td>Exceptional Conditions :</td> <td>20</td> <td>%</td> </tr> <tr> <td>Maximum Period of Excess Opacity Allowed :</td> <td></td> <td>min/hour</td> </tr> </table>	Normal Conditions :	10	%	Exceptional Conditions :	20	%	Maximum Period of Excess Opacity Allowed :		min/hour
Normal Conditions :	10	%								
Exceptional Conditions :	20	%								
Maximum Period of Excess Opacity Allowed :		min/hour								
4. Method of Compliance :	Annual compliance test, EPA Method 9									
5. Visible Emissions Comment :	AC permit limit. VE limit under normal conditions at full load; exceptional conditions are specified for other loads.									

**I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Information Section 1
Combustion Turbine (CT) Peaking Unit Nos. 7-10

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :									
2. Basis for Allowable Opacity : RULE									
3. Requested Allowable Opacity : <table style="margin-left: auto; margin-right: auto; border: none;"><tr><td style="padding: 0 20px;">Normal Conditions :</td><td style="padding: 0 20px;"></td><td style="padding: 0 20px;">%</td></tr><tr><td style="padding: 0 20px;">Exceptional Conditions :</td><td style="padding: 0 20px;">100</td><td style="padding: 0 20px;">%</td></tr><tr><td style="padding: 0 20px;">Maximum Period of Excess Opacity Allowed :</td><td style="padding: 0 20px;">60</td><td style="padding: 0 20px;">min/hour</td></tr></table>	Normal Conditions :		%	Exceptional Conditions :	100	%	Maximum Period of Excess Opacity Allowed :	60	min/hour
Normal Conditions :		%							
Exceptional Conditions :	100	%							
Maximum Period of Excess Opacity Allowed :	60	min/hour							
4. Method of Compliance : EPA Method 9									
5. Visible Emissions Comment : 1. Rule 62-210.700. 2. Max. period of excess opacity allowed - 2 hours/24 hours.									

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Continuous Monitoring System Continuous Monitor 1

1. Parameter Code : EM	2. Pollutant(s): NOX
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	19-Aug-1993
6. Performance Specification Test Date :	19-Aug-1993
7. Continuous Monitor Comment : Water/fuel ratio monitored on continuous basis (40 CFR 60.334). Monitoring incorporated into CT control system and recorded on hourly basis.	

Continuous Monitoring System Continuous Monitor 2

1. Parameter Code : EM	2. Pollutant(s): NOX
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J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	19-Aug-1993
6. Performance Specification Test Date :	19-Aug-1993
7. Continuous Monitor Comment : 40 CFR 75, Appendix E.	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

- [X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

- [X] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Combustion Turbine (CT) Peaking Unit Nos. 7-10

Supplemental Requirements for All Applications

1. Process Flow Diagram :	IC-EU2-L1
2. Fuel Analysis or Specification :	IC-EU2-L2
3. Detailed Description of Control Equipment :	IC-EU2-L3
4. Description of Stack Sampling Facilities :	IC-EU2-L4
5. Compliance Test Report :	3/5/98
6. Procedures for Startup and Shutdown :	IC-EU2-L6
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Appendix A
9. Other Information Required by Rule or Statute :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

**ATTACHMENT IC-EU2-C5
OPERATING CAPACITY COMMENT**

The maximum heat input rate is based on the permit limit at 20°F for one combustion turbine (CT). The four turbines are permitted to operate up to the equivalent of 3,390 hours/year per CT at peak or other lesser loads and 38.7 percent capacity factor. The capacity factor shall be limited to 33 percent based on weighted 12-month rolling average sulfur content not to exceed 0.2 percent. If sulfur content is less than 0.2 percent, the capacity factor can be adjusted up to 38.7 percent. A single turbine can operate at more than 3,390 hours/year. Fuel usage not limited for a single turbine; usage up to 106,120,560 gallons/yr (59°F) is authorized by construction permit. There is no annual emission limit for a single CT.

ATTACHMENT IC-EU2-D
EMISSIONS UNIT REGULATIONS

ATTACHMENT IC-EU2-D
EMISSIONS UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: FPC Intercession City Plant - Combustion Turbines 7-10 (Also CT 11)

FDEP Rules:

Air Pollution Control-General Provisions:

- 62-204.800(7)(b)37.(State Only) - NSPS Subpart GG
- 62-204.800(7)(d) (State Only) - NSPS General Provisions
- 62-204.800(12) (State Only) - Acid Rain Program
- 62-204.800(13) (State Only) - Allowances
- 62-204.800(14) (State Only) - Acid Rain Program Monitoring

Stationary Sources-General:

- 62-210.700(1) - Startup/shutdown/malfunction
- 62-210.700(4) - Maintenance
- 62-210.700(6)

Acid Rain:

- 62-214.300 - Acid Rain Units (Applicability)
- 62-214.320 - Acid Rain Units (Application Shield)
- 62-214.330 - Compliance Options (if 62-214.430)
- 62-214.350(2),(3),(6) - Acid Rain Units (Certification)
- 62-214.370 - Revisions; corrections; (potentially applicable)
- 62-214.430 - Acid Rain Units (Compliance Options)

Stationary Sources-Emission Monitoring (where stack test is required):

- 62-297.310(1) - Test Runs-Mass Emission
- 62-297.310(2)(b) - Operating Rate; other than CTs
- 62-297.310(3) - Calculation of Emission
- 62-297.310(4)(a) - Applicable Test Procedures; Sampling time
- 62-297.310(4)(b) - Sample Volume
- 62-297.310(4)(c) - Required Flow Rate Range-PM/H₂SO₄/F
- 62-297.310(4)(d) - Calibration
- 62-297.310(4)(e) - EPA Method 5-only
- 62-297.310(5) - Determination of Process Variables
- 62-297.310(6)(a) - Permanent Test Facilities-general
- 62-297.310(6)(c) - Sampling Ports
- 62-297.310(6)(d) - Work Platforms
- 62-297.310(6)(e) - Access
- 62-297.310(6)(f) - Electrical Power
- 62-297.310(6)(g) - Equipment Support
- 62-297.310(7)(a)2. - FFSG excess emissions
- 62-297.310(7)(a)3. - Permit Renewal Test Required

- 62-297.310(7)(a)4.
 - 62-297.310(7)(a)5.
 - 62-297.310(7)(a)6.
 - 62-297.310(7)(a)9.
 - 62-297.310(7)(c)
 - 62-297.310(8)
- PM exemption if < 400 hrs/yr
 - PM exemption if < 200 hrs/6 month
 - FDEP Notification - 15 days
 - Waiver of Compliance Tests (fuel sampling)
 - Test Reports

Federal Rules:

NSPS General Requirements:

- 40 CFR 60.7(b)
 - 40 CFR 60.7(f)
 - 40 CFR 60.8(c)
 - 40 CFR 60.8(e)
 - 40 CFR 60.8(f)
 - 40 CFR 60.11(a)
 - 40 CFR 60.11(d)
 - 40 CFR 60.12
- Notification/Recordkeeping (startup/shutdown/malfunction)
 - Notification/Recordkeeping (maintain records-2 years)
 - Performance Tests (representative conditions)
 - Performance Tests (Provide stack sampling facilities)
 - Test Runs
 - Compliance (ref. S. 60.8)
 - Compliance (maintain air pollution control equipment)
 - Circumvention

NSPS Subpart GG:

- 40 CFR 60.332(a)(1)
 - 40 CFR 60.333
 - 40 CFR 60.334
 - 40 CFR 60.335
- NOx for Electric Utility Cts
 - SO2 limits (0.8% sulfur)
 - Monitoring of Operations (WTF ratio)
 - Test Methods

Acid Rain-Permits:

- 40 CFR 72.9(a)
 - 40 CFR 72.9(b)
 - 40 CFR 72.9(c)(1)
 - 40 CFR 72.9(c)(2)
 - 40 CFR 72.9(c)(1)(iv)
 - 40 CFR 72.9(c)(4)
 - 40 CFR 72.9(c)(5)
 - 40 CFR 72.9(e)
 - 40 CFR 72.9(f)
 - 40 CFR 72.9(g)
 - 40 CFR 72.20(a)
 - 40 CFR 72.20(b)
 - 40 CFR 72.20(c)
 - 40 CFR 72.21
 - 40 CFR 72.22
 - 40 CFR 72.23
 - 40 CFR 72.30(a)
 - 40 CFR 72.30(c)
 - 40 CFR 72.30(d)
 - 40 CFR 72.32
 - 40 CFR 72.33(b)
 - 40 CFR 72.33(c)
 - 40 CFR 72.33(d)
 - 40 CFR 72.40(a)
 - 40 CFR 72.40(b)
 - 40 CFR 72.40(c)
- Permit Requirements
 - Monitoring Requirements
 - SO2 Allowances-hold allowances
 - SO2 Allowances-violation
 - SO2 Allowances- other utility units
 - SO2 Allowances-allowances held in ATS
 - SO2 Allowances-no deduction for 72.9(c)(1)(i)
 - Excess Emission Requirements
 - Recordkeeping and Reporting
 - Liability
 - Designated Representative; required
 - Designated Representative; legally binding
 - Designated Representative; certification requirements
 - Submissions
 - Alternate Designated Representative
 - Changing representatives; owners
 - Requirements to Apply (operate)
 - Requirements to Apply (reapply before expiration)
 - Requirements to Apply (submittal requirements)
 - Permit Application Shield
 - Dispatch System ID;unit/system ID
 - Dispatch System ID;ID requirements
 - Dispatch System ID;ID change
 - General; compliance plan
 - General; multi-unit compliance options
 - General; conditional approval

- 40 CFR 72.40(d) - General; termination of compliance options
- 40 CFR 72.51 - Permit Shield
- 40 CFR 72.90 - Annual Compliance Certification

- Monitoring Part 75:
 - 40 CFR 75.5 - Prohibitions
 - 40 CFR 75.10(a)(2) - Primary Measurement; NO_x; except 75.12&.17; Subpart E
 - 40 CFR 75.10(b) - Primary Measurement; Performance Requirements
 - 40 CFR 75.10(c) - Primary Measurement; Heat Input; Appendix F
 - 40 CFR 75.10(f) - Primary Measurement; Minimum Measurement
 - 40 CFR 75.10(g) - Primary Measurement; Minimum Recording
 - 40 CFR 75.11(d) - SO₂ Monitoring; Gas- and Oil-fired units
 - 40 CFR 75.11(e) - SO₂ Monitoring; Gaseous fuel firing
 - 40 CFR 75.12(b) - NO_x Monitoring; Determination of NO_x emission rate; Appendix F
 - 40 CFR 75.20(a)(5) - Initial Certification Approval Process; Loss of Certification
 - 40 CFR 75.20(b) - Recertification Procedures
 - 40 CFR 75.20(c) - Certification Procedures
 - 40 CFR 75.20(g) - Exceptions to CEMS; oil/gas/diesel; Appendix D & E
 - 40 CFR 75.21(a) - QA/QC; CEMS;
 - 40 CFR 75.21(b) - QA/QC; Opacity;
 - 40 CFR 75.21(c) - QA/QC; Calibration Gases
 - 40 CFR 75.21(d) - QA/QC; Notification of RATA
 - 40 CFR 75.21(e) - QA/QC; Audits
 - 40 CFR 75.21(f) - QA/QC; CEMS
 - 40 CFR 75.22 - Reference Methods
 - 40 CFR 75.24 - Out-of-Control Periods; CEMS
 - 40 CFR 75.30(a)(3) - General Missing Data Procedures; NO_x
 - 40 CFR 75.32 - Monitoring Data Availability for Missing Data
 - 40 CFR 75.33 - Standard Missing Data Procedures
 - 40 CFR 75.36 - Missing Data Procedures for Heat Input
 - 40 CFR 75.53 - Monitoring Plan (revisions)
 - 40 CFR 75.54(a) - Recordkeeping-general
 - 40 CFR 75.54(b) - Recordkeeping-operating parameter
 - 40 CFR 75.54(d) - Recordkeeping-NO_x
 - 40 CFR 75.55(c);(e) - Recordkeeping; Special Situations (gas & oil firing)
 - 40 CFR 75.56 - Certification; QA/QC Provisions
 - 40 CFR 75.60 - Reporting Requirements-General
 - 40 CFR 75.61 - Reporting Requirements-Notification cert/recertification
 - 40 CFR 75.63 - Reporting Requirements-Certification/Recertification
 - 40 CFR 75.64(a) - Reporting Requirements-Quarterly reports; submission
 - 40 CFR 75.64(b) - Reporting Requirements-Quarterly reports; DR statement
 - 40 CFR 75.64(c) - Rep. Req.; Quarterly reports; Compliance Certification
 - 40 CFR 75.64(d) - Rep. Req.; Quarterly reports; Electronic format
 - Appendix A-3. - Performance Specifications
 - Appendix A-4. - Data Handling and Acquisition Systems
 - Appendix A-5. - Calibration Gases
 - Appendix A-6. - Certification Tests and Procedures
 - Appendix B - QA/QC Procedures
 - Appendix C-1. - Missing Data; SO₂/NO_x for controlled sources
 - Appendix C-2. - Missing Data; Load-Based Procedure; NO_x & flow
 - Appendix F - Conversion Procedures

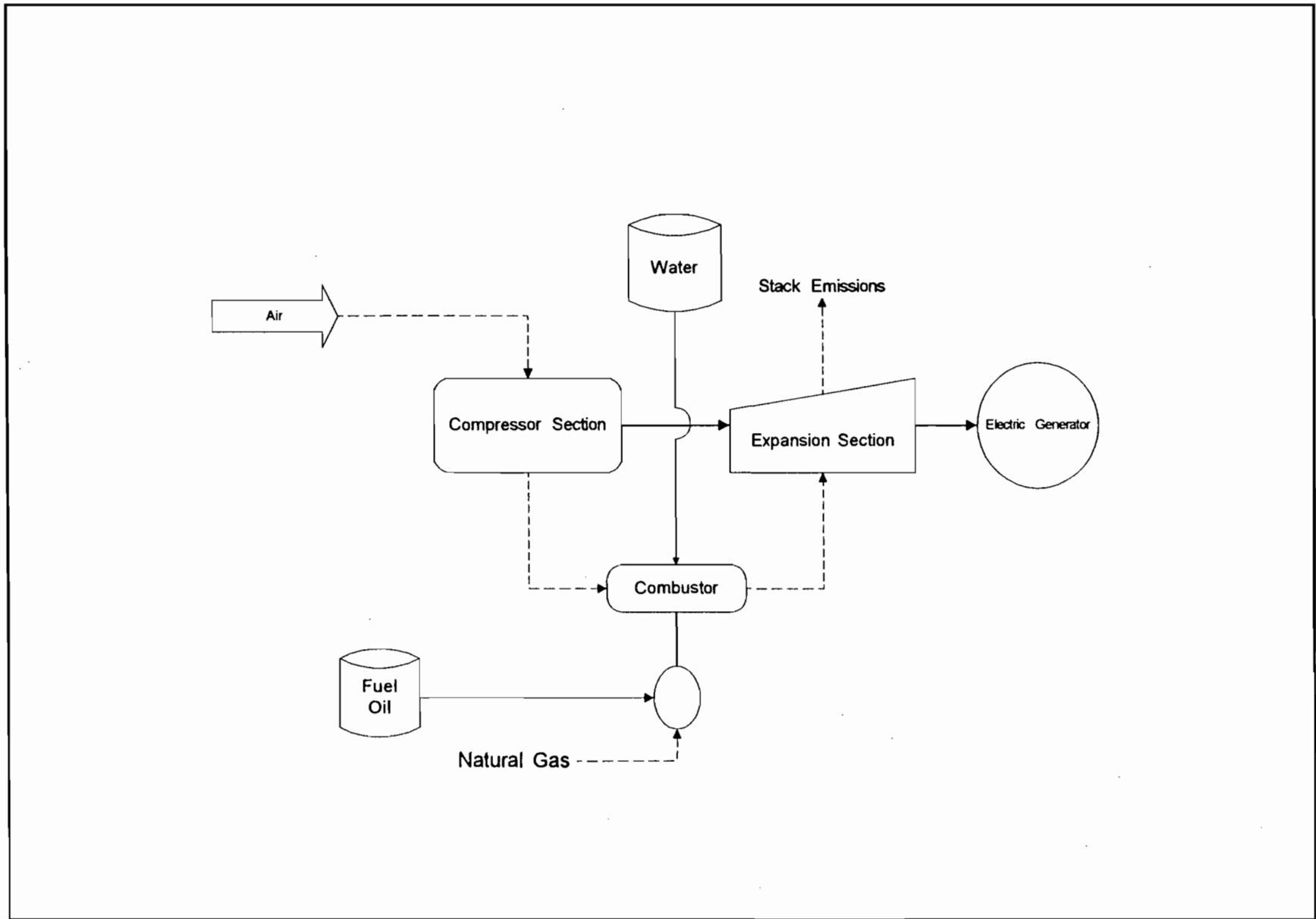
Appendix G-2.
Appendix H

- Determination of CO₂; from combustion sources
- Traceability Protocol

40 CFR Part 77.3
40 CFR Part 77.5(b)
40 CFR Part 77.6

- Offset Plans (future)
- Deductions of Allowances (future)
- Excess Emissions Penalties SO₂ and NO_x

ATTACHMENT IC-EU2-L1
PROCESS FLOW DIAGRAM



Florida Power Corporation

Emission Units

Intercession City

Emission Unit: Combustion Turbines No. 7, 8, 9, 10, 11

Process Area: Overall Plant

Filename: FPCICB.VSD

Latest Revision Date: 6/8/96 03:15 PM



KBN

Engineering and Applied Sciences, Inc.

ATTACHMENT IC-EU2-L2
FUEL ANALYSIS OR SPECIFICATION

Attachment IC-EU2-L2

Fuel Analysis

No. 2 Fuel Oil

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
API gravity @ 60 F	30 ¹	-
Relative density	7.02 lb/gal ²	
Heat content	18,400 Btu / lb (LHV)	
% sulfur	0.2 ²	0.2 ³
% nitrogen	0.025 - 0.03	
% ash	negligible	0.01 ¹

Note: The values listed are "typical" values based upon 1) information gathered by laboratory analysis, and 2) FPC's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data taken from the FPC fuel procurement specification

² Data from laboratory analysis

³ Data from current air permit.

ATTACHMENT IC-EU2-L2

**FUEL ANALYSIS
NATURAL GAS ANALYSIS**

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
Relative density	0.58 (compared to air)	
heat content	950 - 1124 Btu/cu ft.	
% sulfur	0.43 grains/CCF ¹	1 grain/100 CF
% nitrogen	0.8% by volume	
% ash	negligible	

Note: The values listed are "typical" values based upon information supplied to FPC by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data from laboratory analysis

ATTACHMENT IC-EU2-L3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

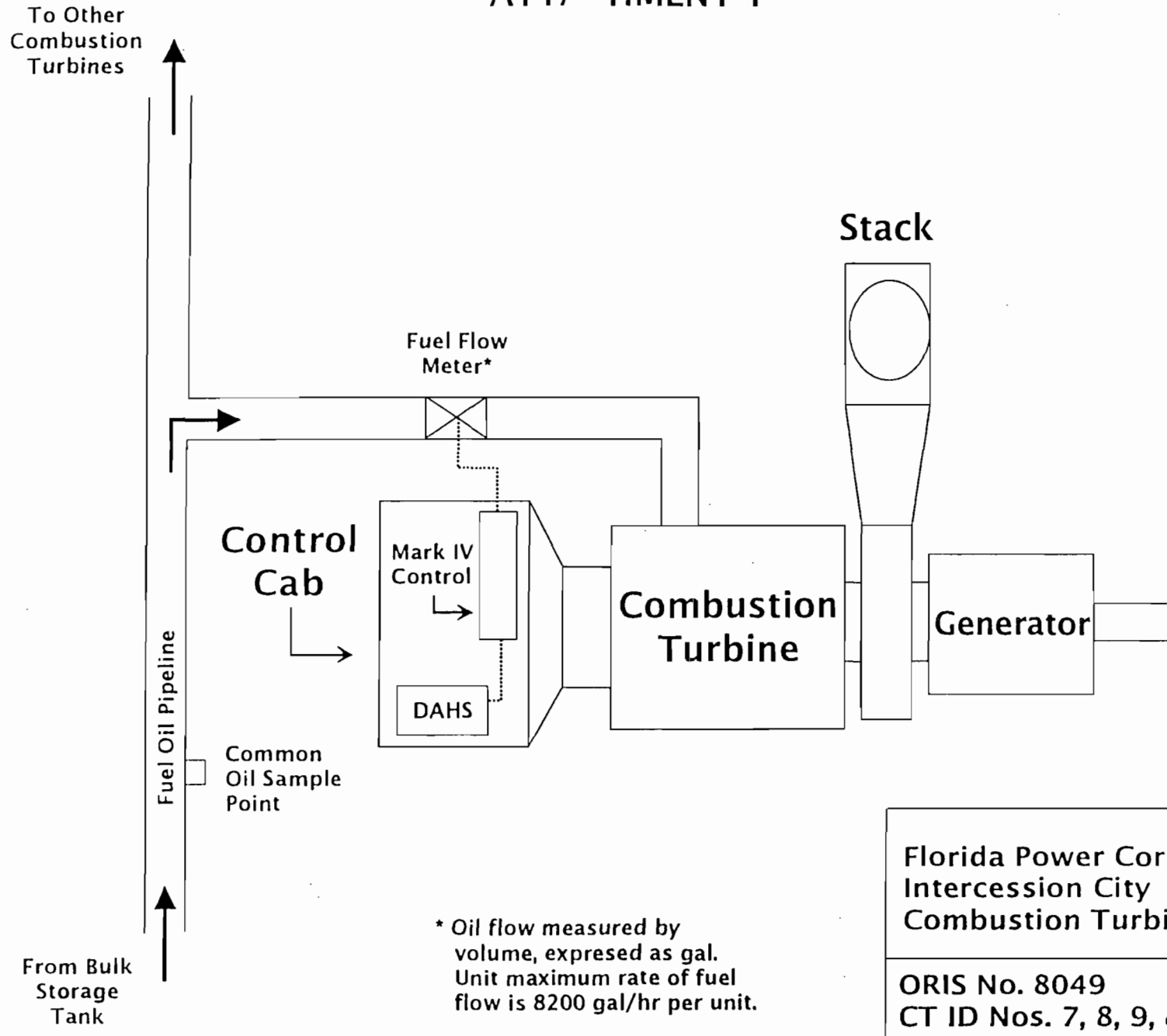
GE Mark IV Nox Control Algorithm Description

The GE Mark IV Nox control algorithm utilizes data from digital temperature and humidity monitors located at each combustion turbine. The algorithm receives and processes the ambient temperature and humidity on a continuous basis. A temperature/humidity correction is used in determining the amount of water to inject for Nox control. This correction accounts for the ambient water entering the combustion chamber, and then it adds the correct amount of injection water in order to ensure compliance with the unit's required water to fuel ratio as determined from the water/fuel curve. This algorithm ensures compliance on a continuous basis regardless of the unit load and ambient weather conditions.

ATTACHMENT IC-EU2-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT 1



ATTACHMENT IC-EU2-L6
PROCEDURES FOR STARTUP AND SHUTDOWN

**ATTACHMENT IC-EU2-L6
PROCEDURES FOR STARTUP/SHUTDOWN**

Startup and shutdown for these units are fully automatic.

Startup for the combustion turbine begins with "lighting off" of the machines on distillate oil.

Corrective actions may include switching the unit from automatic (remote) to local control, or changing fuel. Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit from the system electrical grid), shutting off the fuel and coasting down to stop. The CT is then put "on turning gear" to prevent possible disfiguration of the turbine components.

ATTACHMENT IC-EU2-L10
ALTERNATIVE METHODS OF OPERATION

**ATTACHMENT IC-EU2-L10
Alternative Methods of Operation**

The four combustion turbines making up Emission Unit 2 (P7, P8, P9, and P10) rated at 92.9 megawatts (MW) at 59 degrees Fahrenheit (°F) (GE PG7111EA) and one combustion turbine rated at 171 MW at 59°F (Siemens V84.3) were limited in the air construction permit to an average maximum capacity factor of 38.7 percent (3,390 hours per year operating time). The total hours of operation for the turbines were not to exceed 16,950 unit hours per year (5 units times 3,390 hours/yr/unit). In addition, the capacity factors for these turbines were limited to 33 percent based on a weighted 12 month rolling maximum sulfur content of 0.2 percent. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.2 percent, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	Percent Capacity Factor
0.2 - 0.195	33.0
0.19 - 0.185	34.4
0.18 - 0.175	35.8
0.17 - 0.165	37.2
0.16 - or less	38.7

The four combustion turbines (GE Frame 7EA) were limited in fuel oil consumption on a per unit basis, per aggregate units, or prorated consumption based on the table as described above. The maximum No. 2 fuel oil consumption shall not exceed 7,826 gal/hr/unit or 106,120,560 gal/yr based on 59°F or prorated consumption based on the table as described above.

The other combustion turbine (Siemens V84.3) was limited in fuel oil consumption on a per unit basis, per aggregate units, or prorated consumption based on the table as described above. The maximum No. 2 fuel oil consumption shall not exceed 13,171 gal/hr/unit or 44,649,000 gal/yr based on 59°F or prorated consumption based on the table as described above.

Therefore, any combination of the five combustion turbines may operate for up to 8,760 hours per year provided that both the hourly and annual emission limitations, aggregate annual capacity factors, and aggregate fuel oil consumption limits are met.



RECEIVED
FEB 05 1999
BUREAU OF
AIR REGULATION

February 1, 1999

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

Dear Mr. Fancy:

Re: Inlet Fogging

Thank you for your letter regarding Florida Power Corporation's (FPC) inquiry into the permitting of inlet fogging at its DeBary and Intercession City peaking units. As you know, FPC wishes to install inlet fogging systems on its newer peaking units at the two facilities in order to obtain additional electric output during summer peak demand periods. You requested an estimate of the NOx emissions changes that would result from the use of the fogging system. A summary of the calculations follows.

The fogging system is useful on hot summer days. A water mist is sprayed into the inlet of the combustion turbine. The mist cools the inlet air by evaporation, resulting in a 20 degrees F. reduction in temperature. The air is therefore denser, and the unit can achieve higher output. This also results in slightly higher heat input and NOx emissions, although they are within the allowable limits for the inlet temperature achieved. In addition, the fogging system improves unit efficiency slightly. Efficiency is expected to increase by approximately 1% as a result of the fogging. This will have a nominal offsetting effect on the direct increase in emissions resulting from the use of inlet fogging.

The attached curves, which are a part of the current operation permits for each facility, show the relationship between inlet temperature and heat input and NOx emissions for the GE Frame 7EA combustion turbines at DeBary and Intercession City. These curves do not take into account the improved efficiency achieved with inlet fogging, so they are conservative.

A typical scenario would occur when the ambient temperature is 90 degrees F. If fogging is used, the inlet air to the combustion turbine would be cooled to approximately 70 deg. NOx emissions could increase from 165 lbs/hr to 176 lbs/hr, which is an increase of 11 lbs/hr per unit. This is a worst-case estimate, because it is based on oil firing. The increase would be only 6 lbs/hr while operating on natural gas. At an increase of 11 lbs/hr, inlet fogging could be used for an aggregate of over 7,200 hrs/year and remain below the PSD significant emissions increase threshold of 40 tons/year. Given the long, hot summers here in Florida, limiting the use of the fogging systems to an aggregate total of 7,200 hrs/year per facility should provide adequate operating time while ensuring that emissions do not increase significantly.

Mr. Clair H. Fancy

February 1, 1999

Page Two

In a telephone conversation, Mr. Martin Costello of DEP and Mr. Mike Kennedy of FPC discussed the potential to implement this change through the Title V permit for each facility. Given the minor nature of the change, both to the units and to emissions, FPC requests that the inlet fogging be permitted for use at the DeBary and Intercession City facilities for a total of 7,200 hrs/year at each facility through the associated Title V permits.

Thank you for your consideration of this request. Permitting the use of inlet fogging will help FPC address a very real need for additional generating capacity during the summer of 1999 with a corresponding insignificant increase in emissions. Please contact Mike Kennedy at (727) 826-4334 if you have any questions.

Sincerely,



W. Jeffrey Pardue, C.E.P.
Director



Lawton Chiles
Governor

Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

December 31, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. Michael Kennedy
Manager, Air Programs
Environmental Services Department
Florida Power Corporation
Post Office Box 14042, MAC BB1A
St. Petersburg, Florida 33733-4042

Re: Permit Applicability
Inle: Foggers at DeBary and Intercession City

Dear Mr. Kennedy:

We reviewed your letter dated December 15 regarding permitting requirements to install inlet foggers at DeBary and Intercession City. The installation of the foggers constitutes a physical or operational change for the purpose of actually increasing heat rate throughput and power output from the combustion turbine/electrical generators on relatively hot and dry days. Since emissions are directly affected by fuel use and heat throughput, the Department concludes that installation and use of the foggers constitutes a modification requiring a permit in accordance with Rules 62-210 and 212, F.A.C.

Since the combustion turbine-generators at DeBary and Intercession City are not steam units, emissions changes are normally calculated by comparing past actual to future potential emissions. However, the Department can exercise some latitude in estimating the emissions increases. At the very least, we will need an estimate from FPC regarding the increases. Enclosed is an estimate from our files for similar installations. These can be estimated from the heat input curves, likely hours of operation of the foggers, wet bulb/dry bulb characteristics, etc. It may be possible to minimize emissions increases by controlling the amount of steam injected for NO_x control.

The installation of foggers at the FPL facilities was approved by the District offices on a temporary basis in order to conduct tests and estimate emissions. The data have not been thoroughly evaluated. Approvals of any projects at power plants are now handled by the Bureau of Air Regulation. We can consider a similar request from FPC, but believe that a good estimate can be made regarding the emissions increases from these units.

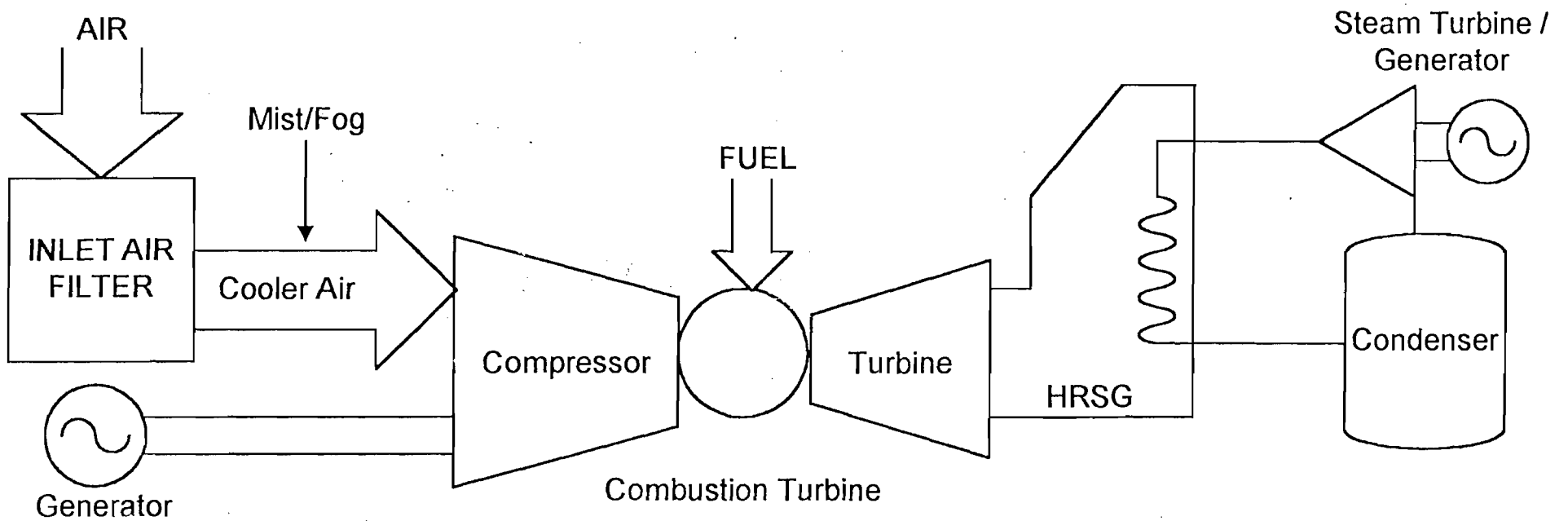
If you have any questions regarding this matter, please call Al Linero at 850/921-9523.

Sincerely,

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

CHF/aal

Fog System and Overfire Operations



BASIS FOR EMISSIONS CALCULATIONS INLET FOGGERS

Ambient Temp (deg F)	Design NOx emissions (lb / hr)	
95	141	FPL Martin CT emissions rate = f (MW load, amb. temp)
75	149	@ 20° F delta, emis. rate delta = +8 lb / hr
59	155	@ 16° F delta, emis. rate delta = +6 lb / hr
40	162	

$$8 \text{ lb} / 20^\circ \text{ F} = 0.4 \text{ lb} / ^\circ \text{ F}$$

$$6 \text{ lb} / 16^\circ \text{ F} = 0.375 \text{ lb} / ^\circ \text{ F}, \text{ so use } 0.4 \text{ for conservatism}$$

Most likely usage will be during heat of day during summer months.....

Foggers on CT Inlet (delta temp)	Duration (hours)	E.F.	lbs NOx
7	2	0.4	5.6
10.5	2	0.4	8.4
11.7	2	0.4	9.36
10.5	2	0.4	8.4
8.5	2	0.4	<u>6.8</u>

Total: 38 lb / day / CT

How many days to reach 40 tons of NOx, assuming 10 hrs / day of operation?

$$38 \text{ lb/day/CT} \times 4 \text{ CT's} = \mathbf{152 \text{ lb / day for facility}}$$

$$40 \text{ tons} = 80,000 \text{ lb}; \quad 80,000 \text{ lb} / 152 \text{ lb / day} = 526 \text{ days per year, so OK for PSD}$$

Most Likely Scenario:

$$4 \text{ months} \times 30 \text{ days} = \mathbf{120 \text{ days}} \times 152 \text{ lb / day} \times \text{ton}/2000 \text{ lb} = 9.12 \text{ tons per year}$$

BASIS FOR EMISSIONS CALCULATIONS INLET FOGGERS

Absolute Worst-Case Scenario **

<u>Foggers on CT Inlet (delta temp)</u>	<u>Duration (hours)</u>	<u>E.F.</u>	<u>lbs NOx</u>
3.5	2	0.4	2.8
2.8	2	0.4	2.2
2.2	2	0.4	1.8
2.9	2	0.4	2.3
5.4	2	0.4	4.3
9.0	2	0.4	7.2
12.5	2	0.4	10.0
13.7	2	0.4	11.0
12.5	2	0.4	10.0
10.5	2	0.4	8.4
6.5	2	0.4	5.2
5.0	2	0.4	<u>4.0</u>

Total: 69.2 lb / day / CT

**Assumes that foggers run 8,760 hrs / year at full saturation

How many days to reach 40 tons of NOx at 24 hours per day?

$$69.2 \text{ lb/day/CT} \times 4 \text{ CT's} = 276.8 \text{ lb / day for facility}$$

$$40 \text{ tons} = 80,000 \text{ lb}; \quad 80,000 \text{ lb} / 276.8 \text{ lb / day} = \underline{289 \text{ days per year}}$$

Z 333 612 585

US Postal Service
Receipt for Certified Mail

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

Sent to	
Mr. J. Michael Kennedy	
Street & Number	
PO Box 14042-MAC BB1A	
Post Office, State, & ZIP Code	
St. Petersburg, FL 33733-4042	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-4-99

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. J. Michael Kennedy
Manager, Air Programs
Environmental Services Dept.
Florida Power Corp.
PO Box 14042-MAC BB1A
St. Petersburg, FL 33733-4042

4a. Article Number
Z333612585

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
JAN 07 1999

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Addressee or Agent)

X 

Thank you for using Return Receipt Service.

CT Inlet Fogger Emission Estimate

Time Hour	Temp Diff. (- 2° from absolute)	NOx lb / hr	Temp Diff. (absolute difference)	NOx lb / hr
0-2	1.5	1.2	3.5	2.8
2-4	0.8	0.6	2.8	2.2
4-6	0.2	0.2	2.2	1.8
6-8	0.9	0.7	2.9	2.3
8-10	3.4	2.7	5.4	4.3
10-12	7.0	5.6	9.0	7.2
12-14	10.5	8.4	12.5	10.0
14-16	11.7	9.4	13.7	11.0
16-18	10.5	8.4	12.5	10.0
18-20	8.5	6.8	10.5	8.4
20-22	4.5	3.6	6.5	5.2
22-24	3.0	2.4	5.0	4.0
Total		50.0	69.2	

TABLE 1. FPC PEAKER OPERATING HISTORY AND PROJECTIONS

UNIT	OPERATING HOURS							
	1993	1994	1995	1996	S1	S2	S3	S4
Suwannee								
P1	329	92	98	196	355	440	979	1223
P2	308	100	94	215	155	236	565	952
P3	174	61	86	192	245	285	763	1070
DeBary								
P7	17	499	438	663	523	1053	1157	1653
P8	679	492	371	711	467	999	1125	1612
P9	573	426	439	753	392	914	1016	1488
P10	728	382	379	630	288	854	870	1426
Int. City								
P7	193	873	649	1125	1299	1025	2139	1851
P8	222	724	562	1269	1193	909	1992	1698
P9	68	697	715	1177	1090	801	1854	1557
P10	155	579	512	1186	992	697	1732	1411
Total Systemwide Peaker Hours					21,427	21,013	37,316	36,731

- S1 -- nuclear unit operating, no gas conversions
- S2 -- nuclear unit operating, with gas conversions
- S3 -- nuclear unit down until 10/1/97, no gas conversions
- S4 -- nuclear unit down until 10/1/97, with gas conversions



RECEIVED

DEC 18 1998

BUREAU OF
AIR REGULATION

December 15, 1998

Mr. Al Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32366

Dear Mr. Linero:

Re: Proposed Inlet Fogging Systems for FPC's Intercession City and DeBary Facilities

This letter is a follow-up to previous discussions with the Department regarding the above-referenced issue. As you know, at high ambient temperature, combustion turbine (CT) units cannot generate as much power because of lower compressor inlet density. To compensate for a portion of the loss of output, inlet cooling is proposed to be installed ahead of the CT inlet. We have become aware that Florida Power and Light (FPL) has initiated such a project at their Martin Station.

General Electric Model 7EA CTs, nominally rated at 96 MW each, began operation at DeBary (P7 through P10) and Intercession City (P7 through P10) in 1992 and 1993, respectively. As permitted, each of these CTs has an associated heat input curve that characterizes the performance of the units in relation to inlet air temperature. The Department's guidance on this issue (*Guidance on Rate of Operation During Compliance Testing for Combustion Turbines, September 18, 1995*) recognizes that the inlet air temperature is the predominant factor in affecting the mass throughput rate of CTs. Further, the temperature is referenced to the CT inlet rather than ambient, as some CTs are equipped with inlet air conditioning systems (e.g., chillers or evaporative coolers) to maintain optimum operating temperature. Inlet air temperature and ambient temperature are equivalent in cases where no conditioning systems are used. In cases where conditioning systems are used, the CTs will not be operating in excess of the heat input curve (a surrogate for an emissions curve) that is already a part of the permit.

The inlet air cooling system proposed for FPC's Intercession City and DeBary sites will utilize direct water spray fogging. The inlet fogging system will consist of an array of nozzles mounted on manifold piping and arranged in grids. The system would be designed to cool inlet air from

Mr. Linero
December 15, 1998
Page 2

95°F dry bulb with 50 percent relative humidity (RH) to 95 percent RH, which corresponds to an inlet air temperature of 80°F. The units will continue to operate on the heat input curve that is already a part of the air permit for these units. In addition, FPC emphasizes that no physical change will be made to the CT units themselves.

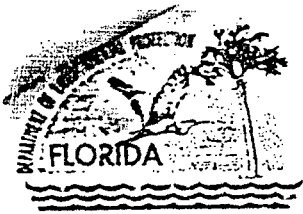
As we discussed by telephone, since there are no physical changes or changes in the method of operation being made to the combustion turbines, and since the units will continue to operate on the permitted heat input curve, new source review should not apply to this project. Please review this issue for permitting applicability; it is requested that the Department provide direction in the near future, because FPC would like to have such a system installed on these units in time to handle the anticipated peaking demands on our generating system during the summer of 1999.

Thank you for your consideration of this proposed project. If you have any questions or require additional information, please contact me at (727) 826-4334.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Michael Kennedy". The signature is fluid and cursive, with a long, sweeping tail that extends to the right.

J. Michael Kennedy, Q.E.P.
Manager, Air Programs



Department of Environmental Protection

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

Permittee:
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33711

FINAL Permit No.: 0970014-001-AV
Facility ID No.: 0970014
SIC Nos.: 49
Project: Initial Title V Air Operation Permit

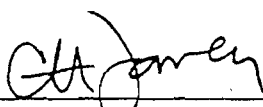
This permit is for the operation of the Intercession City Plant. This facility is located at 6525 Osceola Polk County Line Road, Intercession City, Osceola County; UTM Coordinates: Zone 17, 446.3 km East and 3126 km North; Latitude: 28° 15' 38" North and Longitude: 81° 32' 51" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 405, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS
EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July, 1996)
Phase II Acid Rain Application/Compliance Plan received December 14, 1995.
ORDER EXTENDING PERMIT EXPIRATION DATE (dated December 22, 1997)

Effective Date: January 1, 1998
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002

HLR

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sms/csl

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL TITLE V PERMIT

In the Matter of an
Application for Permit

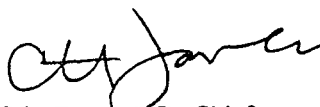
Mr. W. Jeffery Pardue, C.E.P.
Director of Environmental Services
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33711

DEP File No. 0970014-001-AV
Intercession City Plant
Osceola County

Enclosed is the FINAL Title V Permit, Number 0550003-001-AV, for Florida Power Corporation's Intercession City Plant located at 6525 Osceola Polk County Line Road, Intercession City, Osceola County. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.).

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

SENDER:
 Complete items 1 and/or 2 for additional services.
 Complete items 3, 4a, and 4b.
 Print your name and address on the reverse of this form so that we can return this card to you.
 Attach this form to the front of the mailpiece, or on the back if space does not permit.
 Write "Return Receipt Requested" on the mailpiece below the article number.
 The Return Receipt will show to whom the article was delivered and the date delivered.

Thank you for using Return Receipt Service.

1. Addressee's Address
 2. Restricted Delivery
 Consult postmaster for fee.

3. Article Addressed to:
 Mr. W. Jeffery Pardue, C.E.P.
 Director of Environmental Services
 Florida Power Corporation
 3201 34th Street South
 St. Petersburg, Florida 33711

4a. Article Number
 P 263 584 665

4b. Service Type
 Registered
 Express Mail
 Return Receipt for Merchandise
 COD

5. Received By: (Print Name)
 [Signature]

6. Signature: (Address of Agent)
 [Signature]

7. Date of Delivery
 1/7/98

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994

CERTIFICATE OF SERVICE

Agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including copies) and copies were mailed by U.S. Mail before the close of business on [Date] otherwise noted:

er Corporation *

ates, Inc.

INTERNET E-mail Memorandum)

INTERNET E-mail Memorandum)

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.

[Signature] 1/5/98
 (Clerk) (Date)

Appendix H-1, Permit History/ID Number Changes

Florida Power Corporation
Intercession City

Facility ID No.: 0970014-001-AV

Permit History (for tracking purposes):

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u>	<u>Revised Date(s)</u>
-001	Combustion Turbine Peaking Unit #1	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #2	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #3	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #4	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #5	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #6	AO49-176549	07/20/90	01/15/96		
-002	92.9 MW Simple Cycle Gas CT	AC49-203114/	08/17/92	12/31/95		10/06/93
-002	92.9 MW Simple Cycle Gas CT	PSD-FL-180				11/15/93
-002	92.9 MW Simple Cycle Gas CT					07/15/94
-002	185.5 MW Simple Cycle Gas CT					01/20/95
-003	185.5 MW Simple Cycle Gas CT					

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 30ORL4900014

To: Facility ID No.: 0970014

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 15, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, C.E.P.
Director of Environmental Services
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33711

PSD-FL-1806

RE: Amendment to AC 49-203114/PSD-FL-180(A) Permit
NSPS Custom Fuel Monitoring Schedule
Florida Power Corporation
Intercession City Plant

Dear Mr. Pardue:

The Department has reviewed your September 10, 1997 letter requesting an NSPS Custom Fuel Monitoring Schedule, which was submitted to EPA, and natural gas analysis data received by the Department on December 5, 1997. The schedule would only apply to a monitoring schedule for sulfur dioxide (SO₂) and nitrogen oxide (NO_x) when natural gas is being fired at the subject facility (Refer to Attachments Nos. 1 & 4). The facility is required by the permit to comply with Subpart GG of the New Source Performance Standards (NSPS) 40 CFR 60. For sources utilizing pipeline quality natural gas, 40 CFR 60.334(b) and 60.334(b)(2) state that a custom fuel monitoring schedule, if supported by data which demonstrates compliance with NSPS emission limits, may be approved by the Administrator of EPA. This authority has been delegated to EPA's regional offices and, EPA Region IV will provide their determination of this request to the Department. The Department received a letter, dated October 25, 1997, from EPA on November 3, 1997, stating that a custom fuel monitoring schedule for this facility was acceptable, since it complied with all items of the attachment to the custom fuel monitoring guidance memo issued by EPA Headquarters on August 14, 1987 (Refer to Attachments Nos. 2 & 3). The results from a minimum of one sampling event each quarter for six quarters were provided by the permittee, which demonstrated consistent compliance with the allowable SO₂ emissions limits specified under 40 CFR 60.333 and this permit. Therefore, upon issuance of the amended permit, the permittee shall begin monitoring the sulfur content of natural gas as specified in 2.c. of the Custom Fuel Monitoring Schedule for Natural Gas. In accordance with the EPA and Department determination, the permit specific condition will be amended as follows:

I. Specific Condition Number;

From

16. Sulfur, nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be based on a weighted 12 month rolling average from fuel delivery receipts. The records of fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.2 percent.

To

15. The permittee shall monitor sulfur content and nitrogen content of the new No. 2 fuel oil and sulfur content of natural gas. These values may be provided by the vendor and the frequency of determinations of these values shall be as follows:

A. New No. 2 Fuel Oil

The values, sulfur and nitrogen content, shall be determined on each occasion that fuel is transferred to the storage tanks from any other source. Records of these values shall be kept by the facility for a five year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.2 percent.

B. Natural Gas

Pursuant to 40 CFR 60.334(b)(2), a custom fuel monitoring schedule for the determination of these values shall be followed for the natural gas fired at this facility and shall be as follows:

Custom Fuel Monitoring Schedule for Natural Gas (NG)

1. Monitoring of fuel nitrogen content shall not be required if NG is the only fuel being fired in the gas turbines.
2. Sulfur Monitoring
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2), or the latest edition(s).

- b. This custom fuel monitoring schedule shall become effective on the date this permit becomes valid. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333 and the conditions of this permit, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein the applicant may begin monitoring as per the requirements of 2.c.
 - c. If after the monitoring required in item 2.b. above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333 and the conditions of this permit, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d. Should any sulfur analysis as required in items 2.b. or 2.c. above indicate noncompliance with 40 CFR 60.333 and the conditions of this permit, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
3. If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
 4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

II. Attachments to be Incorporated;

- FPC letter dated September 26, 1997
- EPA letter dated August 14, 1987
- EPA letter dated October 25, 1997
- Natural Gas Analysis Data received December 5, 1997

Mr. W. Jeffrey Pardue
AC 49-203114/PSD-FL-180(A)
December 15, 1997
Page 4 of 5

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 of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. 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;
- (g) A statement of the relief sought by petitioner, stating precisely the action the 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 amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application 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 amendment 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.

Mr. W. Jeffrey Pardue
AC 49-203114/PSD-FL-180(A)
Permit Amendment
December 15, 1997
Page 5 of 5

This letter amendment must be attached to AC 49-203114/PSD-FL-180(A) Permit and shall become part of the permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/CSL

Attachments

cc: L. Kozlov, CD K. Kosky, P.E., Golder Associates, Inc.
A. Linero, DEP
S. Osbourn, FPC

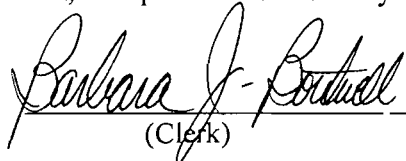
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this AMENDMENT was sent by certified mail to the person(s) listed below and all copies were sent by U.S. mail to the person(s) listed above before the close of business on 12/16/97 :

Mr. W. Jeffrey Pardue, C.E.P., FPC

Clerk Stamp

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

 12/16/97
(Clerk) (Date)

Attachment No. 1

Amendment to AC 49-203114/PSD-FL-180(A) Permit
NSPS Custom Fuel Monitoring Schedule
Florida Power Corporation
Intercession City Plant



bcc: J. M. Kennedy
J. L. Tillman
D. W. Sorrick
W. B. Hicks
M. V. Westbrook

September 10, 1997

File: DeBary/Air/Corresp.
Int. City/Air/Corresp.
Suwannee/Air/Corresp.

Mr. Clair Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Magnolia Park Courtyard
Tallahassee, Florida 32301

Dear Mr. Fancy:

Re: Florida Power Corporation's Intercession City, DeBary and Suwannee Facilities
Customized Fuel Monitoring Schedules

Florida Power Corporation (FPC) has been permitted for the use of natural gas at the above-referenced three sites. Specifically, natural gas conversions have been permitted for DeBary combustion turbines (CTs) 7, 8, 9 and 10; Intercession City CTs 7, 8, 9, 10 and 11; and Suwannee CTs 1, 2 and 3. These CTs are subject to New Source Performance Standards (NSPS 40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any CT to monitor the sulfur and nitrogen content of the fuel as follows: 1) If the turbine fuel is supplied by a bulk storage tank, then the sulfur and nitrogen content are to be determined whenever new fuel is transferred into the bulk storage tank, and 2) If the turbine fuel is supplied without an intermediate bulk storage tank, then daily monitoring of the sulfur and nitrogen content of the fuel is required.

Since the natural gas used by the CTs does not pass through an intermediate bulk storage tank, FPC is hereby requesting a customized fuel monitoring schedule as allowed by 40 CFR 60.334(b)(2). While firing natural gas, FPC requests the following customized fuel monitoring schedule which was developed based on an EPA guidance memorandum (Attachment A):

1. Monitoring of natural gas nitrogen content shall not be required in accordance with page 2 of the EPA guidance memorandum attached.
2. Sulfur Monitoring
 - a. Analysis for sulfur content of the natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3245-81; and ASTM D4048-82 as referenced in 40 CFR 60.335(b)(2).

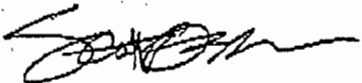
Mr. Fancy
September 10, 1997
Page 2

- b. Effective on the approval date of the customized fuel monitoring schedule, sulfur monitoring shall be conducted twice a month for six months. If this monitoring shows little variability in the sulfur content and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
 - c. If the monitoring required by 2(b) above, of the sulfur content of the natural gas shows little variability and the calculated sulfur dioxide emissions represent consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d. Should any sulfur analysis, as required by items 2(b) or 2(c) above, indicate noncompliance with 40 CFR 60.333, FPC will notify the Department of Environmental Protection (DEP) of such excess emission and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas shall be monitored weekly during the interim period while this schedule is being reexamined.
3. FPC will notify the DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content; varying by more than 10 grains/1000 of gas) shall be considered as a change in natural gas supply. Sulfur content of the natural gas will be monitored weekly during the interim period when this monitoring schedule is being reexamined.
 4. Records of sample analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPC for a period of three years, and be available for inspection by appropriate regulatory personnel.
 5. FPC will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Brooker Lab.

Data from natural gas at the Brooker Lab site is considered representative of the sulfur content of the natural gas at these three FPC sites (DeBary, Intercession City and Suwannee), since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas.

If you or your staff have any questions about this request, please do not hesitate to contact me at (813) 866-5158.

Sincerely,



Scott H. Osbourn
Senior Environmental Engineer

Attachments :

cc/attach: Mike Harley, DEP
David McNeal, EPA Region IV
Ken Kosky, P.E., Golder Associates

Attachment No. 2

Amendment to AC 49-203114/PSD-FL-180(A) Permit
NSPS Custom Fuel Monitoring Schedule
Florida Power Corporation
Intercession City Plant

05 07-92 11:45AM FROM EPA FPS/SSCD



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

AUG 14 1992

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG

FROM: John B. Rasmic, Chief *John B. Rasmic*
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional Offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

05 07-92 11:45AM FROM EPA PFS/SSCD

TO 29195413470

PG06/007

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with 660.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO_x emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional Offices are encouraged to contact SSCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to SSCD for approval.

If you have any questions, please contact Sally M. Farrell at FTS 382-2675.

Attachment

- cc: John Cranshaw
- George Walsh
- Robert Ajax
- Earl Salo

05-07-92 11:45AM FROM EPA FPS/SSCD

TO 89195413470

P007/007

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
2. Sulfur Monitoring
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).
 - b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
 - c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

Attachment No. 3

Amendment to AC 49-203114/PSD-FL-180(A) Permit
NSPS Custom Fuel Monitoring Schedule
Florida Power Corporation
Intercession City Plant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

4APT-ARB

OCT 23 1997

RECEIVED

NOV 03 1997

BUREAU OF
AIR REGULATION

Mr. Michael M. Harley, P.E., DEE
P.E. Administrator
Emissions Monitoring Section
Bureau of Air Monitoring and Mobile Sources
Air Resources Management Division
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJECT: Custom Fuel Monitoring Schedule Proposed for
Stationary Gas Turbines at the Florida Power
Corporation Intercession City, DeBary, and Suwannee
Power Plants

Dear Mr. Harley:

This letter is in response to your September 26, 1997,
request for a determination regarding a custom fuel monitoring
schedule proposed for the following combustion turbines (CTs) at
the referenced power plants:

Intercession City: CTs 7, 8, 9, and 10

DeBary: CTs 7, 8, 9, and 10

Suwannee: CTs 1, 2, and 3

The natural gas fired turbines listed above are subject to
40 C.F.R. Part 60, Subpart GG (Standards of Performance for
Stationary Gas Turbines), and Region 4 has concluded that the
proposed custom fuel monitoring schedule is acceptable because it
is consistent with guidance that the U.S. Environmental
Protection Agency (EPA) previously issued regarding such
schedules. In addition, the Florida Power Corporation proposal
to use fuel analysis results from sampling conducted at the
Florida Gas Transmission Company Brooker Lab for all three plants
is acceptable since there are no additional entry points for
natural gas or other sulfur containing streams between the
proposed sampling site and the three plants in question.

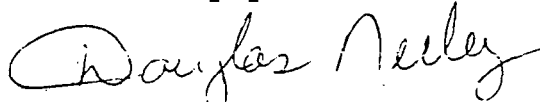
According to 40 C.F.R. §60.334(b)(2), owners and operators
of stationary gas turbines subject to Subpart GG are required to
monitor fuel nitrogen and sulfur content on a daily basis if a
company does not have intermediate bulk storage for its fuel.
40 C.F.R. §60.334(b)(2) also contains provisions allowing owners
and operators of turbines that do not have intermediate bulk
storage for their fuel to request approval of custom fuel

monitoring schedules that allow for less frequent monitoring of fuel nitrogen and sulfur content. In a memorandum dated August 14, 1987, the EPA Compliance Monitoring Branch provided guidance regarding acceptable custom fuel monitoring provisions for natural gas fired turbines, and this memorandum also gave EPA regional offices the authority to approve custom fuel monitoring schedules for Subpart GG turbines.

Under the EPA guidance issued in 1987, the requirement to monitor the nitrogen content of pipeline quality natural gas was waived entirely since the Agency determined that this type of fuel does not contain any fuel-bound nitrogen that can cause NO_x emissions. As an alternative to daily sulfur monitoring, the 1987 policy describes a three stage process under which owners and operators of natural gas fired turbines can obtain approval to conduct sampling on a semiannual basis. In the first step of this process the sulfur content of the fuel must be monitored on a bimonthly basis for at least six months. If the results of this bimonthly monitoring verify compliance with the applicable sulfur limit and indicate little variability in the sulfur content of the fuel, the fuel sampling and analysis frequency can be reduced from a bimonthly to a quarterly basis. If six quarters of fuel monitoring data verify compliance with the applicable sulfur standard and indicate little variability in the sulfur content of the fuel, the sampling and analysis frequency can be reduced to a semiannual basis. Since the custom fuel monitoring approach proposed by the Florida Power Corporation for the natural gas fired turbines at the Intercession City, DeBary, and Suwannee Plants is identical to that outlined in the policy issued by EPA in 1987, it is acceptable to Region 4.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of my staff at 404/562-9102.

Sincerely yours,



R. Douglas Neeley
Chief
Air and Radiation Technology
Branch
Air, Pesticides and Toxics
Management Division

cc: Charles Logan, FL DEP

Attachment No. 4

Amendment to AC 49-203114/PSD-FL-180(A) Permit
NSPS Custom Fuel Monitoring Schedule
Florida Power Corporation
Intercession City Plant

Note: The analysis of the natural gas fired at this facility is too voluminous to be attached. The analysis indicated consistent compliance with NSPS, the conditions of this permit, and is available for review upon request.

Z 333 618 148

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Jeff Pardue	
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FPC	
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St. Pete FL	
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0970014-002-AC 5-17-99	

PS Form 3800, April 1995

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Jeffrey Pardue
FPC
PO Box 14042
St. Petersburg, FL

33733

4a. Article Number

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4b. Service Type

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- Express Mail Insured
- Return Receipt for Merchandise COD

7. Date of Delivery

MAY 19 1999

5. Received By: (Print Name)

6. Signature (Addressee or Agent)

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[Signature]

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PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0970014-002-AC (PSD-FL-180B)

Florida Power Corporation Intercession City Plant

Units 7-10 Inlet Fogger Project

Osceola County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Florida Power Corporation (FPC). The permit is to install foggers at the compressor inlets of four 93-megawatt natural gas and No. 2 fuel oil-fired General Electric PG7111EA combustion turbine-electrical generators at the Intercession City Plant in Osceola County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are Florida Power Corporation, Post Office Box 14042, MAC BB1A, St. Petersburg, Florida 33733.

These units normally achieve their maximum rated output on cold days because the greater compressor inlet density allows greater throughput in the rotor or expansion section of the combustion turbine. The maximum power output is lower on hot days because of the lower compressor inlet density. The foggers increase hot-day power output by approximately 4-6 MW through evaporative cooling of the compressor inlet air although maximum output overall temperatures will remain 93 MW or below. The foggers provide no benefit on very humid or cold days and will not be used under those conditions. The result is that maximum hourly air pollution emissions will not increase although actual annual emissions will increase within their permitted limits because more fuel will be used on hot, relatively dry days.

Although the number of days during which the foggers can economically operate probably limits emissions increases to levels below significance for the purposes of PSD applicability, FPC proposes enforceable conditions to insure non-applicability, FPC asserts and the Department accepts that the modification will not cause any meaningful change in the hours of operation of these simple cycle peaking units. They are already limited to 3390 hours of operation per unit. The maximum increase in annual emissions caused by project in tons per year is summarized below along with the PSD-significant levels.

Pollutants	Annual Emissions Increase	PSD Significant Levels
PM/PM ₁₀	3	25/15
SAM	3	7
SO _x	40	40
NO _x	39	40
VOC	1	40
CO	11	100

An air quality impact analysis was not required or conducted. No significant impacts are expected to occur as a result of this project. It will not cause or contribute to a violation of any ambient air quality standard or increment.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of "Public Notice of Intent to Issue Air Construction Permit Modification." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. 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, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 29-106.301.

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

A complete project file 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
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555
Fax: 407/897-5963

The complete project file includes the application, technical evaluation, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

PROOF OF PUBLICATION

STATE OF FLORIDA,
COUNTY OF OSCEOLA

Before me, the undersigned authority, personally appeared Dan L. Autrey, who on oath says that he is General Manager of the Osceola News-Gazette, a twice weekly newspaper published at Kissimmee, in Osceola County, Florida; that the attached copy of the advertisement was published weekly in the regular and entire edition of said newspaper in the issues of:

..... April 10, 1999.....

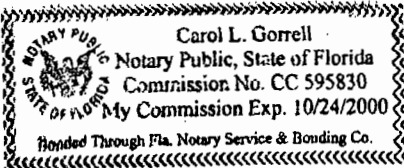
Affiant further says that the Osceola News-Gazette is a newspaper published in Kissimmee, in said Osceola County, Florida, and that the said newspaper has heretofore been continuously published in said Osceola County, Florida, each week and has been entered as periodicals postage matter at the post office in Kissimmee, in said Osceola County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Dan L. Autrey

Sworn to and subscribed before me by Dan L. Autrey, who is personally known to me, this .. 10. . . day of

..... April 19 99.....

Carol L. Gorrell
Carol L. Gorrell
(N.P. Seal)



PROOF OF PUBLICATION

FROM

Osceola News-Gazette

Kissimmee, Florida
OSCEOLA COUNTY

In the Matter of

*Public Notice of Intent To
Issue Air Construction
Permit Modification*

Filed day of 19.....
First Publication .. *April 10* .. 19*99*..
Last Publication .. *April 10* .. 19*99*..

Make Remittance to Osceola News-Gazette
Kissimmee, Florida

Z 333 618 083

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Jeff Pardue	
Street & Number	
FPC	
Post Office, State, & ZIP Code	
St. Pete FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
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PSD-FI-180B	

PS Form 3800, April 1995

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- Addressee's Address
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Jeffrey Pardue
FPC
PO Box 14042 MAC BB1A
St. Petersburg, FL
33733

4a. Article Number

2 333 618 083

4b. Service Type

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| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

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MAR 17 1999

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Sent to Mr. J. Michael Kennedy	
Street & Number PO Box 14042-MAC BB1A	
Post Office, State, & ZIP Code St. Petersburg, FL 33733-4042	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-4-99

PS Form 3800, April 1995

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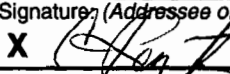
I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. J. Michael Kennedy
Manager, Air Programs
Environmental Services Dept.
Florida Power Corp.
PO Box 14042-MAC BB1A
St. Petersburg, FL 33733-4042

5. Received By: (Print Name)

6. Signature (Addressee or Agent)
X 

4a. Article Number
Z333612585

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
JAN 07 1999

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Appendix H-1, Permit History/ID Number Changes

Florida Power Corporation
Intercession City

Facility ID No.: 0970014-001-AV

Permit History (for tracking purposes):

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u>	<u>Revised Date(s)</u>
-001	Combustion Turbine Peaking Unit #1	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #2	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #3	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #4	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #5	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #6	AO49-176549	07/20/90	01/15/96		
-002	92.9 MW Simple Cycle Gas CT	AC49-203114/	08/17/92	12/31/95		10/06/93
-002	92.9 MW Simple Cycle Gas CT	PSD-FL-180				11/15/93
-002	92.9 MW Simple Cycle Gas CT					07/15/94
-002	185.5 MW Simple Cycle Gas CT					01/20/95
-003	185.5 MW Simple Cycle Gas CT					

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 30ORL4900014
To: Facility ID No.: 0970014

Notes:

- 1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
- 2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
- {Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Permit #:0970014-001-AV PATS:

Issue:31-DEC-1997 Expire:31-DEC-2002

Project #/Name	Owner/Company	Type/Sub	Receive
001/INTERCESSION CITY PLANT	FLORIDA POWER CORPORTATION	AV /00	14-JUN-1996
002/FPC-INTERCESSION CITY	FLORIDA POWER CORPORTATION	AC /1D	24-FEB-1999
003/FPC-INTERCESSION CITY PLA	FLORIDA POWER CORPORTATION	AC /1A	25-MAY-1999
004/FPC-INTERCESSION CITY T5	FLORIDA POWER CORPORTATION	AV /02	27-DEC-1999
/FLORIDA POWER/INTERCESSIO	FLORIDA POWER CORPORTATION	A0 /99	25-FEB-1985
/FLORIDA POWER/INTERCESSIO	FLORIDA POWER CORPORTATION	A0 /00	20-FEB-1990
/FLORIDA POWER/INTERCESSIO	FLORIDA POWER CORPORTATION	AC /1A	03-OCT-1991
/INTERCESSION CITY #1 AC49	FLORIDA POWER CORPORTATION	AC /M1	28-APR-1995
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