

Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

December 16, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Piper
Repowering Licensing Manager
Florida Power & Light
Post Office Box 14000
Juno Beach, Florida 33408

RE: FPL Ft. Myers Plant
Permit No. 0710002-005-AC Inlet Foggers

Dear Mr. Piper:

The Department reviewed your request dated November 30, 1999 to extend the expiration date of the above mentioned construction permit. The request is acceptable and the referenced permit is hereby modified as follows:

EXPIRATION DATE

FROM: December 31, 1999
TO: March 31, 2000

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

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, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.


for _____
Howard L. Rhodes, Director
Division of Air Resources
Management

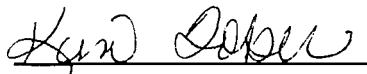
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12-17-99 to the person(s) listed:

Mr. Richard Piper, FPL*
Mr. Bill Thomas, SWD

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)

12-17-99
(Date)

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): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Richard Piper, RLM FP & L PO Box 14000 Juno Beach, FL 33408		4a. Article Number Z 031 391 904	
		4b. Service Type <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	
5. Received By: (Print Name) _____		7. Date of Delivery _____	
6. Signature: (Addressee or Agent) X <i>[Signature]</i>		8. Addressee's Address (Only if requested and fee is paid/USPS) _____	

Thank you for using Return Receipt Service.



Z 031 391 904

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

Sent to	Richard Piper
Street & Number	FP & L
Post Office, State, & ZIP Code	Juno Beach, 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	12-17-99
0710002-005-AC	

PS Form 3800, April 1995



FPL

Florida Power & Light Company, Environmental Services Dept., P.O. Box 14000, Juno Beach, FL 33408

November 30, 1999

RECEIVED

DEC 03 1999

BUREAU OF AIR REGULATION

Mr. Al Linero, P.E.
State of Florida
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: FPL Fort Myers Plant
Air Construction Permit #0710002-005AC
Expiration Date

Dear Mr. Linero:

This correspondence is to request an extension to the expiration date for the subject air construction permit. This permit, issued by the Department on July 20, 1999, (and which expires 12/31/99) was for the installation and testing of inlet foggers to the existing peaking combustion turbines located at the Fort Myers generating site. Because of problems in scheduling the emissions testing required by the permit, FPL requests that the Department extend the expiration date by 3 months (through March, 2000) to allow for the testing and reporting of the NOx emissions. I feel certain that we can easily meet this proposed date, and submit our request to modify the Title V permit within that timeframe as well.

Please do not hesitate to contact me at (561) 691-7058 if you have any questions.

Very truly yours,

Rich Piper
Repowering Licensing Manager
Florida Power & Light Company

October 14, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Piper
Repowering Licensing Manager
Florida Power & Light
Post Office Box 14000
Juno Beach, Florida 33408

RE: FPL Ft. Myers Plant
Facility No. 0710002-004-AC

Dear Mr. Piper:

The Department reviewed your request dated September 15, 1999 to modify the above mentioned construction permit. The request is acceptable and the referenced permit is hereby modified as follows:

SPECIFIC CONDITION 10

The test method for visible emissions shall be EPA Method *9 and the test method for nitrogen oxides shall be EPA Method 7 or 7E*, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

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, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Mr. Richard Piper, FPL*
Mr. Bill Thomas, SWD

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.

Mr. Richard Piper
Page 4
October 14, 1999

(Clerk)

(Date)

FedEx USA Airbill

FedEx Tracking Number

809317238517

Form L.D. No.

0200

Sender's Copy

1 From (please print and press hard)

Date 7-20-99 Sender's FedEx Account Number

Sender's Name TERESA HERON Phone 850 921-9529 or 921-9533

Company FLORIDA DEPT OF ENV. PROTECTION

Address 2600 BLAIR STONE ROAD - Air Div.

City TALLAHASSEE State FL ZIP 32399-2400

2 Your Internal Billing Reference Information

3 To (please print and press hard)

Recipient's Name RICHARD PIPER Phone (561) 691-7058

Company FPL 0710002-005-AC - Ft. Myers

Address 700 UNIVERSE BLVD

City JUNO BEACH State FL ZIP 33408

For HOLD at FedEx Location check here For WEEKEND Delivery check here

Service Conditions, Declared Value, and Limit of Liability - By using this Airbill, you agree to the service conditions in our current Service Guide or U.S. Government Service Guide.

Questions? Call 1-800-Go-FedEx (800)463-3339

The World On Time

4a Express Package Service Packages under 150 lbs.

FedEx Priority Overnight (Next business morning) FedEx Standard Overnight (Next business afternoon) FedEx First Overnight (Earliest next business morning delivery to select locations) (Higher rates apply) FedEx 2Day (Second business day) FedEx Express Saver (Third business day)

4b Express Freight Service Packages over 150 lbs.

FedEx Overnight Freight (Next business day) FedEx 2Day Freight (Second business day) FedEx Express Saver Freight (Up to 3 business days)

5 Packaging

FedEx Letter (Declared value limit \$500) FedEx Pak (Declared value limit \$500) FedEx Box FedEx Tube Other Pkg.

6 Special Handling

Does this shipment contain dangerous goods? No Yes (One box must be checked) Dry Ice, 9, UN 1845 x kg. Cargo Aircraft Only

7 Payment

Bill to: Sender (Account No. in Section 1 will be billed) Recipient (Enter FedEx Account No. or Credit Card No. below) Third Party Credit Card Cash/Check

FedEx Account No. 1859-3028-7 Exp. Date

Table with 4 columns: Total Packages, Total Weight, Total Declared Value, Total Charges. Values: \$.00

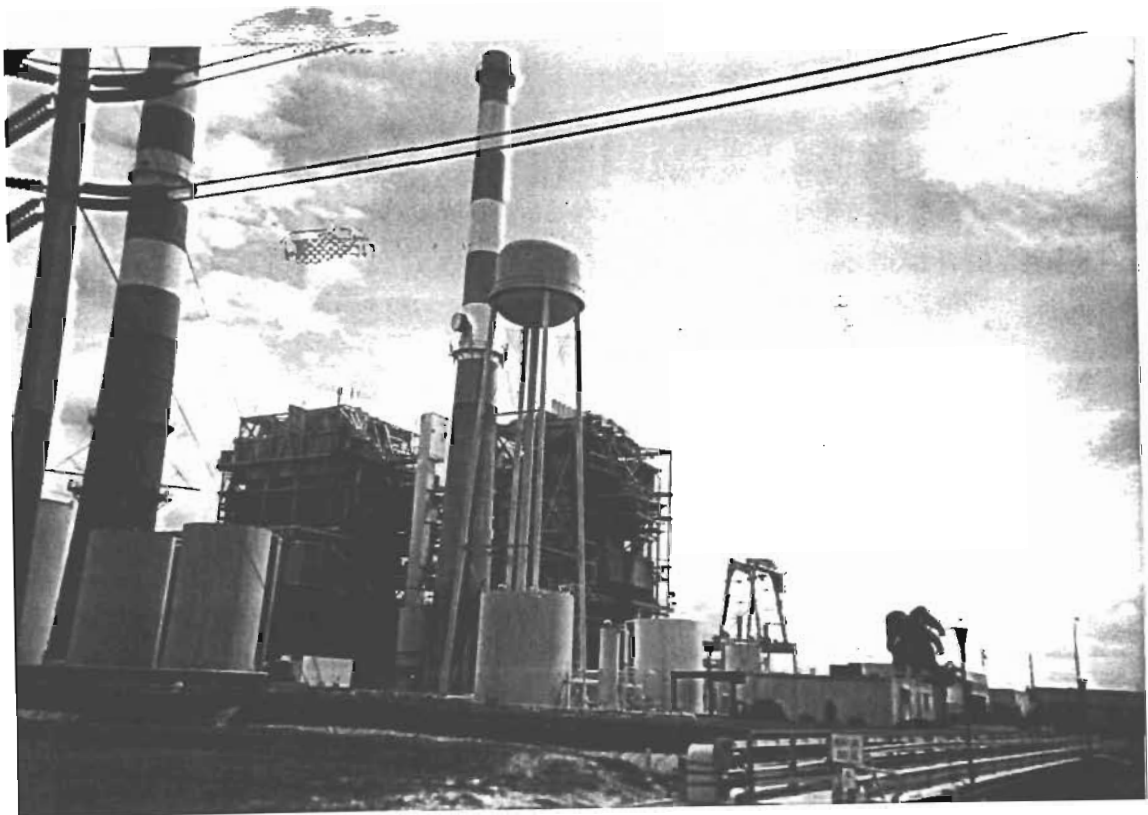
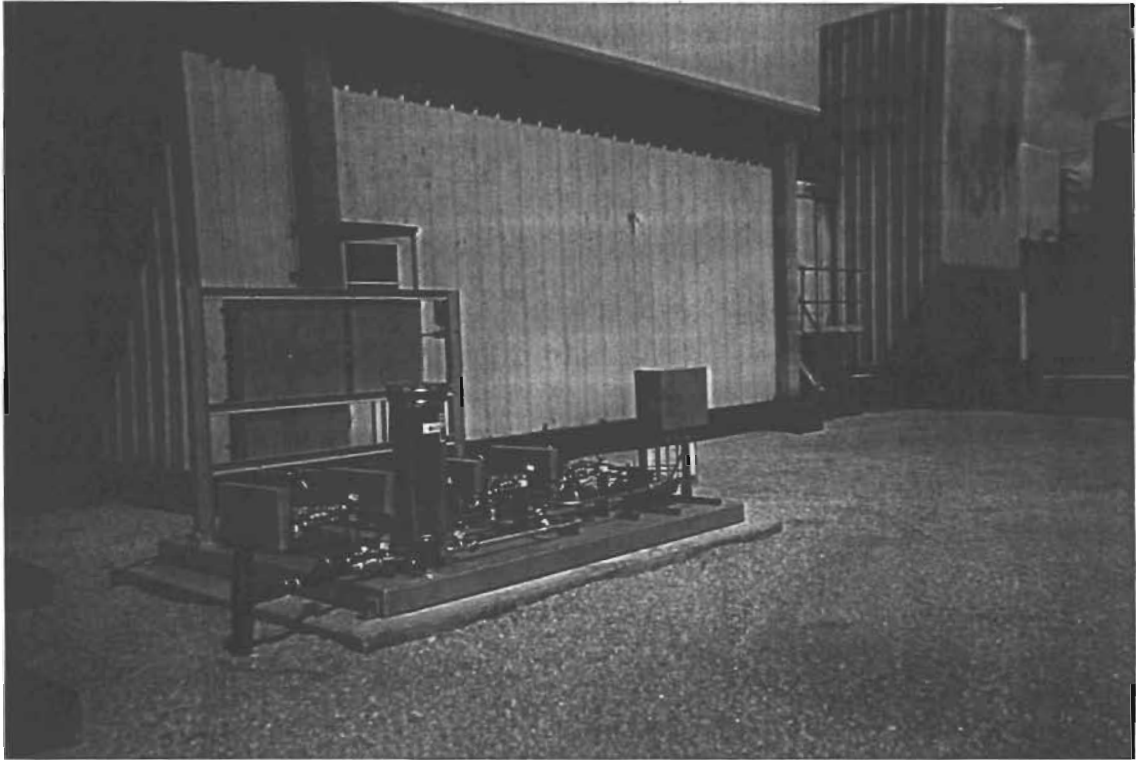
8 Release Signature

Your signature authorizes Federal Express to deliver this shipment without obtaining a signature and agree to indemnify and hold harmless Federal Express from any resulting claims.

322

Rev. Date 3/98 Part #153024 ©1994-98 FedEx PRINTED IN U.S.A. G&PE 10/98





STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the Matter of an
Application for Permit Modification by:

Mr. William Reichel, Plant General Manager
Florida Power & Light
Post Office Box 430
Ft. Myers, Florida 33905

DEP File No. 0710002-005-AC
Inlet Foggers Installation
Simple Cycle Units 003-014
Ft. Myers Power Plant

Enclosed is the Final Permit Number 0710002-005 AC for an air construction permit to install foggers at the compressor inlet of twelve 63-megawatt, No. 2 fuel oil-fired General Electric PG 7821 combustion turbine-electrical generators at the Fort Myers Plant in Lee County. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 7-20-99 to the person(s) listed:

William Reichel, FPL*
Richard Piper, FPL
Phil Barbaccia, DEP SD
Gregg Worley, EPA
John Bunyak, NPS
Ken Kocsky, P.E., Golder Associates

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.

Ken Kocsky 7-20-99
(Clerk) (Date)

FINAL DETERMINATION

Florida Power and Light Company (FP&L)
Ft. Myers Power Plant, Lee County
Inlet Foggers Installation
DEP File No: 0710002-005-AC

An Intent to Issue an air construction permit, authorizing the installation of inlet foggers on the twelve 63 MW (gross capacity) simple cycle General Electric PG7821 combustion turbine-electrical generators at the Ft. Myers Power Plant was distributed on May 7, 1999. This facility is located at 10650 State Road 80, Lee County, Florida.

The Public Notice of Intent to Issue Air Construction Permit was published in the Ft. Myers News-Press on June 8, 1999. Comments were received from EPA and FP& L.

EPA comments, responding to the Department request, were related to the applicability determination of the New Source Performance Standard to these turbines. EPA stated that "if the maximum operating rate of the turbines still occurs under cold weather conditions when the foggers cannot be used to boost the capacity of these units, the installation of the foggers will not constitute a modification." The Department, received additional information from FP&L that confirmed that the maximum turbine capacity at 25 degrees F (lowest recorded temperature in Ft. Myers) is 895 mmBtu/hr (HHV). This is compared to the maximum turbine operating capacity of 723 mmBtu/hr (HHV) at 80 degrees F, which would be the result of lowering the temperature in the 90 degree F range with the use of the foggers.

FP&L comments were related to Specific Condition No. 20 of the draft permit. FPL stated that Specific Condition 20 should be revised to reflect the total NOx produced by these turbines, rather than the incremental increase due to the fogger installation. In addition, FP&L requested that representative units only, be tested to assure initial and ongoing compliance with this Specific Condition. FP&L added that the Fort Myers peaking units, for which this permit is being considered, are identical machines, and as such, do not warrant individual testing. FP&L stated that the Department has issued a previous permit to FPL's facility at Port Everglades which allowed for this type of representative testing for identical peaking units such as the ones at Fort Myers.

The Department evaluated FP&L request and revised Specific Conditions 20 as shown below:

Inlet foggers may be installed at the compressor inlet to each of the twelve General Electric PG7821 combustion turbine-electric generators. The twelve foggers may operate up to 6,000 hours per year in aggregate (average 500 hours per unit per year). Maximum heat input shall not exceed 760 mmBtu/hr/unit and NOx emissions shall not exceed 530 lb/hr/unit at 59 °F. This maximum heat input rate will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing after the foggers are installed. Thereafter, compliance shall be demonstrated as required in Specific Condition 13.

Nitrogen oxide emissions shall be determined by a stack test on one representative turbine. Testing shall be performed each federal fiscal year, no later than September 30th. [Rule 62-296.570(4)(a)3, and (4)(b)5., F.A.C..]"

The final action of the Department will be to issue the permit with the changes noted above.

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):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

William Reichel
 FP & L
 PO Box 430
 Ft. Myers, FL
 33905

4a. Article Number

Z 333 618 202

4b. Service Type

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

7. Date of Delivery

7-23-99

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)

X *Jan G. Smak*

PS Form 3811, December 1994

102595-98-B-0229

Domestic Return Receipt

Thank you for using Return Receipt Service.

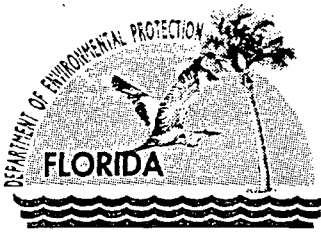
Z 333 618 202

US Postal Service
Receipt for Certified Mail

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

Sent to		<i>William Reichel</i>	
Street & Number		<i>FP & L</i>	
Post Office, State, & ZIP Code		<i>Ft. Myers, FL</i>	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee		<i>(Ft. Myers)</i>	
Return Receipt Showing to Whom & Date Delivered		<i>(FP & L)</i>	
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		<i>7-20-99</i>	
<i>0710002-005-AC</i>			

PS Form 3800, April 1995



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 & Light Co.
Post Office Box 430
Ft. Myers, Florida 33905

Authorized Representative:

Mr. William Reichel

DEP File No.	0710002-005-AC
Project	Emissions Units 003 -014 Inlet Foggers
SIC No.	4911
Expires:	December 31, 1999

PROJECT AND LOCATION:

Permit for the installation of inlet foggers on the twelve 63 (gross capacity) megawatt simple cycle General Electric PG7821 combustion turbine-electrical generators Emissions Units 003 thru 014.

The units are located at the FPL Fort Myers Plant, 10650 State Road 80 Fort Myers, Lee County. UTM coordinates are: Zone 17; 422.3 km E and 2952.9 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 APPENDIX MADE A PART OF THIS PERMIT:

Appendix GC

Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

AIR CONSTRUCTION PERMIT 0710002-005-AC

FACILITY DESCRIPTION

Currently, this facility generates electric power from two residual fuel oil-fired steam units (FFSG) with a combined generating capacity of 593 megawatts (MW) and 12 distillate fuel oil-fired simple cycle combustion turbines (SCCT) with a combined net generating capacity of 708 MW. Air construction permit (DEP File 0710002-004-AC) was recently issued to repower the FFSGs with 6 combined cycle natural gas-fired combustion turbines. It is expected the repowering project to be in operation by the year 2002.

This permitting action is for the installation of inlet foggers at the twelve (12) distillate fuel oil-fired simple cycle combustion turbines that commenced commercial operation in 1974.

This Project is exempt from the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) as discussed stated in the Technical Evaluation and Preliminary Determination dated May 20, 1999.

REGULATORY CLASSIFICATION

This facility, FPL Fort Myers Power Plant, is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).

This facility is a major source of hazardous air pollutants (HAPs) and is also subject to the provisions of Title IV, Acid Rain, Clean Air Act as amended in 1990.

PERMIT SCHEDULE

- 06/08/99 Notice of Intent published in Ft Myers News-Press
- 05/26/99 Distributed Intent to Issue Permit
- 03/17/99 Received Application
- 05/07/99 Application deemed complete

RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

- Application received on March 17, 1999.
- Department's Intent to Issue and Public Notice Package dated May 26, 1999.
- FPL's comments dated April 16, and May 7, 1999

PERMIT SPECIFIC CONDITIONS

This permit addresses the following emissions unit(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-003	Combustion Turbine #1
-004	Combustion Turbine #2
-005	Combustion Turbine #3
-006	Combustion Turbine #4
-007	Combustion Turbine #5
-008	Combustion Turbine #6
-009	Combustion Turbine #7
-010	Combustion Turbine #8
-011	Combustion Turbine #9
-012	Combustion Turbine #10
-013	Combustion Turbine #11
-014	Combustion Turbine #12

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

Each unit has a rated gross capacity of 63 MW. The combustion turbines commenced commercial operation in May, 1974.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

1. Permitted Capacity. The heat input rate to each combustion turbine shall not exceed 895 MMBtu per hour (at 25 degrees F).
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition No. 1]
2. Methods of Operation - Fuels. The only fuels authorized to be burned in these emissions units is No. 2 distillate fuel oil or on-specification used oil from Florida Power and Light Company operations. See specific condition 6. These fuels may be mixed or burned simultaneously.
[Rule 62-213.410, F.A.C.; AO36-223496; and, 0710002-003-AO]
3. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition No. 8]

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

4. Emissions Unit Operating Rate Limitation After Testing. See specific condition 11.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

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

5. Visible Emissions. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO36-223496, Specific Condition No. 3]

6. “On-Specification” Used Oil. Only “on-specification” used oil generated by the Florida Power and Light Company in the production and distribution of electricity shall be fired in these emissions units. The total combined quantity allowed to be fired **at this facility** shall not exceed 1,500,000 gallons per calendar year. “On-specification” used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered “off-specification” used oil and shall not be fired. See specific conditions 5., 18. and 19.

CONSTITUENT/PROPERTY*	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flashpoint	100 degrees F minimum
PCBs	less than 2 ppm**

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

**PCBs must be less than 2 ppm for on-specification used oil to be fired in these emissions units.

[40 CFR 279.11; AO36-22346; and, 0710002-003-AO]

Excess Emissions

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

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

8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

AIR CONSTRUCTION PERMIT 0710002-005-AC

Monitoring of Operations

9. Determination of Process Variables.

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

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

Test Methods and Procedures

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

10. The test method for visible emissions shall be EPA Method 9 and the test method for nitrogen oxides shall be EPA Method 7, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

11. **Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2), F.A.C.]

12. Applicable Test Procedures.

(a) Required Sampling Time.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

AIR CONSTRUCTION PERMIT 0710002-005-AC

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

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

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

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. The following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 100 tons per year or more of any regulated air pollutant, other than lead, lead compounds measured as elemental lead, and acrylonitrile. See permit limiting standards and applicable test methods as noted in specific conditions 5., 6. & 10.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit. See specific conditions 13.(a).a. & b., and 14.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

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

AIR CONSTRUCTION PERMIT 0710002-005-AC

such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

14. Visible Emissions Testing - Annual and Renewal. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning only liquid fuels for less than 400 hours per year. To meet permit renewal requirements, the permittee shall conduct visible emissions tests on 3 (three) of the CTs that did not operate more than 400 hours per year on liquid fuels during the previous five year period. [Rules 62-297.310(7)(a)4. & 8., F.A.C.]

15. Compliance with the “on-specification” used oil requirements, including an analysis for PCBs, will be determined from a sample collected from each batch delivered for firing. See specific conditions 6., 18. and 19. [Rules 62-4.070 and 62-213.440; and, 40 CFR 279]

Recordkeeping and Reporting Requirements

16. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

17. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]

18. Records shall be kept of each delivery of “on-specification” used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of “on-specification” used oil fired in these emissions units. On a quarterly basis, for each quarter during which used oil is burned, a report shall be submitted to the Department’s South District office concerning the quantity and analysis of the on-specification used oil burned. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See specific conditions 6., 15. and 19. [Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, AO36-223496]

19. The permittee shall include in the “Annual Operating Report for Air Pollutant Emitting Facility” a summary of the “on-specification” used oil analyses for the calendar year and a statement of the total quantity of “on-specification” used oil fired in Combustion Turbines 1 to 12 during the calendar year. See specific conditions 6., 15. and 18. [Rule 62-213.440(1)(b)2.b., F.A.C.]

20. Inlet foggers may be installed at the compressor inlet to each of the twelve General Electric PG7821 combustion turbine-electric generators. The twelve foggers may operate up to 6,000 hours per year in aggregate (average 500 hours per unit per year). Maximum heat input shall not exceed 760 mmBtu/hr/unit and NO_x emissions shall not exceed 530 lb/hr/unit at 59 °F. This maximum heat input rate will vary depending upon ambient conditions and the combustion

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing after the foggers are installed. Thereafter, compliance shall be demonstrated as required in Specific Condition 13. Nitrogen oxides emissions shall be determined by a stack test on one representative turbine. Testing shall be performed each federal fiscal year, no later than September 30th. [Rule 62-296.570(4)(a)3, and (4)(b)5., F.A.C.]”

Applicable Standards and Regulations:

21. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75.

22. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

General and Administrative Requirements

23. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-0114. All documents related to reports, tests, and notifications should be submitted to the DEP South District office, 2295 Victoria Avenue, Suite 364, Ft Myers, Florida 33902-3381 and phone number 941/332-6975.

24. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

25. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

26. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]

27. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212]

28. Permit Extension: *This permit expires on December 31, 1999.* The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rule 62-4.080, F.A.C.].

29. Application for a Modification of Title V Permit: An application for a modification of the Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy sent to the Department's South District office. [Chapter 62-213, F.A.C.]

30. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

31. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's South District office by March 1st of each year.

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 permit also constitutes:
- a) Determination of Best Available Control Technology ()
 - b) Determination of Prevention of Significant Deterioration (); and
 - c) Compliance with New Source Performance Standards ().
- 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.

Golder Associates Fax

To: Teresa Heron

Fax Number: (850)922-6979

Agency: Florida Department of
Environmental Protection

Date: July 9, 1999

From: Kennard F. Kosky, P.E.

e-mail: ken_kosky
@golder.com

Our ref: 9737572Y/F1

Voice Mail: Ext 516

RE: FPL Fort Myers Plant – Foggers and EPA Letter of June 22, 1999

Total pages (including cover): 3

Hard copy to follow? Yes

MESSAGE

Teresa: I am providing information related to your July 8, 1999 e-mail to Rich Piper and your request concerning the EPA letter dated June 22, 1999. First to clarify the heat input. The chart provided in my May 6, 1999 letter was for the peak operation mode of the Fort Myers turbines. The ISO rating using the high heating value is 717.8 mmBtu (LHV) and about 760 mmBtu/hr (HHV) when firing distillate oil, the only fuel currently used in these turbines. The 807 mmBtu/hr (HHV) is actually for natural gas, which was revised in the subsequent submittal. These values are not inconsistent with the 895 mmBtu/hr (HHV) which corresponds to a turbine inlet temperature of about 25 degrees F. The lowest ambient temperature recorded in Fort Myers over a 51-year period was 26 degrees F. With a turbine inlet of 0 degrees F, the rated heat input is 920 mmBtu/hr. However, such an ambient temperature would not occur in Fort Myers. The Title V application indicated 850 mmBtu/hr for 59 degrees F. This was mislabeled as the ISO condition when in fact it corresponds to about 32 degrees F a very low temperature for Fort Myers but not the lowest recorded. Therefore, the maximum 895 mmBtu/hr heat input is appropriate.

Second and more importantly, the operation of the foggers would not change the maximum heat input rated for the turbine at the low turbine inlet conditions. There are both engineering and scientific limitations as well as practical drawbacks. I have attached copy of a standard psychrometric chart that can be used in determining the amount of theoretical cooling available given the ambient (dry bulb) and relative humidity. As indicated in the application, using foggers when the ambient temperature is 80 degrees F and 80 percent relative humidity provides a theoretical cooling of 5 degrees F. When water is added to the air stream some of the air's sensible heat becomes latent by the evaporation of the water droplets. There is no heat transfer (except for minor differences in the water and air temperature) and no

RECEIVED
JUL 12 1999
BUREAU OF AIR REGULATION
Golder Associates

23rd St., Suite 500
Gainesville, FL 32653
U.S.A.
Telephone: (352) 336-5600
Fax: (352) 336-6603

**Comprehensive Consulting
Services in Geotechnical
Engineering, Environmental
Remediation and Waste
Management**

Environmental Remediation

Waste Management

Air Resources

Water Resources

Landfill Siting & Design

Geophysics

Civil Engineering & Construction

Mining & Quarrying

Oil and Gas Waste Management

Soil and Rock Mechanics

Nuclear Waste Management

Risk Assessment

Energy Projects

Transportation

Offices in Australia, Canada,
Finland, Germany, Hong Kong,
Hungary, Indonesia, Italy, South
America, Sweden,
United Kingdom, United States

Golder Associates – Page 2
Fax to Teresa Heron July 9, 1999

change in the total heat in the air. However, the dry bulb air temperature (the temperature the turbine sees) decreases and the relative humidity increases. This increases mass flow and more power output of the turbine.

At low ambient temperatures where the turbine has the maximum heat input and highest kilogram/hr emissions, using foggers would increase the turbine inlet temperature. This would actually decrease turbine performance. For example, at an ambient temperature of 32 degrees F the water temperature for the foggers would have to be greater than 32 degrees F or the pipes would freeze and the fogging system could not be operated. Given a more likely water temperature of 60 degrees F, the water would transfer heat to the air increasing its temperature.

I have drawn both examples on the attached psychrometric chart. You will also note that at the low ambient (i.e., dry bulb) temperatures, the amount of evaporative cooling is extremely small. In fact, for any cooling effect to occur, the temperature of the water must be at or less than the ambient temperature. In addition at temperatures below about 30 degrees F there would be no cooling. Therefore, the Department conclusion is correct that the maximum turbine capacity will not change with the installation of the foggers.

I hope this information is helpful. Please call if you have any questions.

Regards, Ken

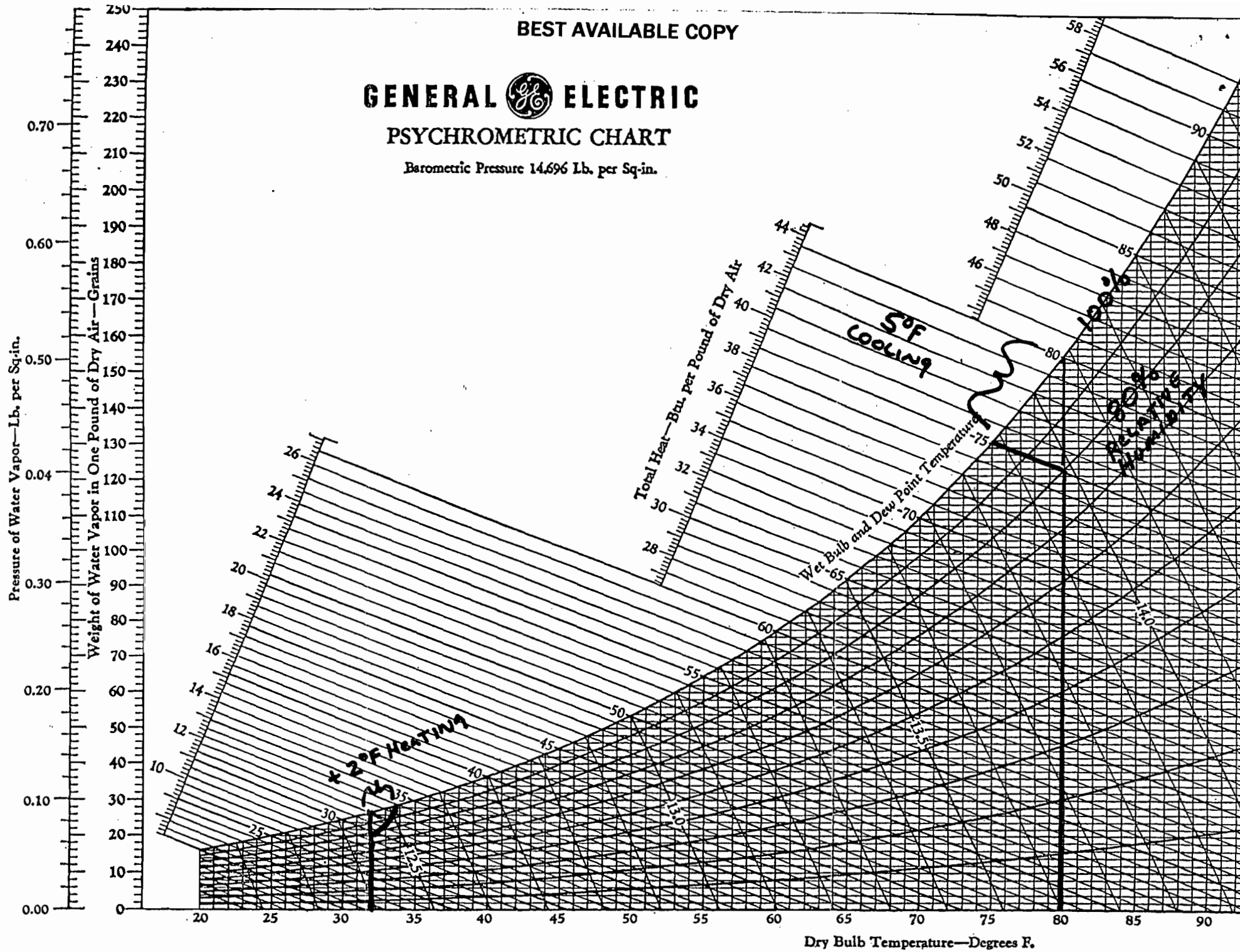


cc: Rich Piper

BEST AVAILABLE COPY

GENERAL ELECTRIC PSYCHROMETRIC CHART

Barometric Pressure 14.696 Lb. per Sq.in.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUN 22 1999

RECEIVED

JUN 25 1999

BUREAU OF
AIR REGULATION

4APT-ARB

Mr. A.A. Linero, P.E.
Administrator
New Source Review Section
Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: New Source Performance Standard Applicability Determination for Existing Stationary Gas Turbines at the Florida Power and Light (FP&L) Fort Myers Plant

Dear Mr. Linero:

Thank you for your May 27, 1999, letter which requested a determination regarding whether the addition of inlet foggers to 12 existing simple cycle combustion turbines at the referenced plant would make these units subject to 40 C.F.R. Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). Since your letter did not provide specific details regarding the maximum heat input capacity, electrical output, or hourly nitrogen oxides (NO_x) emissions for these turbines immediately before and after the addition of the foggers, we cannot conclusively determine whether or not the addition of the foggers will constitute a modification that will make the turbines subject to Subpart GG. We do, however, concur with your conclusion that the addition of the foggers will not constitute a modification if the maximum operating capacity for these turbines does not increase as a result of the fogger installation. The basis for this conclusion and additional information regarding New Source Performance Standard (NSPS) applicability issues for the FP&L turbines are contained in the remainder of this letter.

According to your letter, Units 3 - 14 at the Fort Myers Plant have a nominal capacity of 63 megawatts (MW) each, and they normally achieve their maximum rated output on cold days because the increased compressor inlet air density on these days allows greater throughput in the rotor or expansion sections of the turbines. In order to increase the capacity of the turbines on hot, dry days, FP&L is adding inlet foggers that use evaporative cooling to lower the temperature of the compressor inlet air, and the resulting increase in capacity is estimated to be between two to four MW per turbine. Because the inlet foggers use evaporative cooling to lower the temperature of the inlet air, they function best on hot, dry days, and will provide limited benefit on cold or humid days.

Based upon your review of FP&L's plans, you have concluded that the maximum turbine operating rate when the inlet foggers are in use will be lower than the maximum turbine capacity that can be achieved on cold days when the foggers cannot be used to increase the output of the units. If this conclusion about the relative capacity of the turbines under these operating scenarios is true, the addition of the inlet foggers would not be a modification as defined in 40 C.F.R. §60.14(a). This section of the rule defines a modification as any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies. 40 C.F.R. §60.14(b) clarifies that the emission rates before and after a physical or operational change are to be expressed in kilograms per hour when determining if an emission increase has occurred.

In the case of turbines at the Fort Myers Plant, potential emissions from the 12 turbines at the plant will increase on an annual basis as a result of the fogger installation since adding this equipment will allow the turbines to operate at a higher rate during the portion of the year when evaporative cooling is an effective means of increasing the turbine operating rate. When determining whether or not the addition of the inlet foggers constitutes a modification, however, emissions before and after the change must be evaluated on an hourly basis, rather than an annual basis. Since NO_x mass emissions from the turbines will tend to increase as heat input and the corresponding electrical output increase, the easiest way to determine whether the addition of the inlet foggers will be a modification is to compare the maximum operating capacity of the turbines before the addition of the foggers to the maximum turbine operating capacity following their installation.

Because the maximum operating rate for the turbines prior to the fogger installation was achieved under cold weather conditions, the applicability of Subpart GG would depend upon whether the maximum operating capacity of the units after the fogger installation exceeds their previous cold weather operating capacity. If there are any scenarios under which the foggers allow the turbines to operate at a capacity higher than they could have previously operated under cold weather conditions, the installation of the inlet foggers will constitute a modification. Conversely, if the maximum operating rate of the turbines still occurs under cold weather conditions when the foggers cannot be used to boost the capacity of these units, the installation of the foggers will not constitute a modification.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,



R. Douglas Neeley

Chief

Air and Radiation Technology Branch

Air, Pesticides and Toxics

Management Division

cc: Teresa Heron, BAR
Richard Pipes, FPL

SD

NPS

William Reichel

Ken Kosky, Golder Assoc.



FPL

June 18, 1999

Ms. Teresa Heron, P.E.
New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

RECEIVED

JUL 08 1999

BUREAU OF AIR REGULATION

**RE: FPL Fort Myers Combustion Turbine Inlet Foggers
Proposed Permit 0710002-005-AC**

Dear Teresa:

FPL offers the following comments on the proposed permit:

Specific Condition 20 should be revised as follows to reflect the total NOx produced by these turbines, rather than the incremental increase due to the fogger installation:

"Inlet foggers may be installed at the compressor inlet to each of the twelve General Electric PG7821 combustion turbine-electric generators. The twelve foggers may operate up to 6,000 hours per year in aggregate (average 500 hours per unit per year). Maximum heat input shall not exceed 807 mmBtu / hr / unit and NOx emissions shall not exceed ~~11.60~~ 564 lb. / hr / unit at 59 °F. This maximum heat input rate will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing after the foggers are installed. Thereafter, compliance shall be demonstrated as required in Specific Condition 13."

In addition, FPL requests that representative units only, be tested to assure initial and ongoing compliance with this Specific Condition. The Fort Myers peaking units, for which this permit is being considered, are identical machines, and as such, do not warrant individual testing. The Department has issued a previous permit to FPL's facility at Port Everglades which allowed for this type of representative testing for identical peaking units such as the ones at Fort Myers. Following is an example of the language from the Port Everglades Title V permit:

"C.7. Nitrogen Oxides. Nitrogen oxides emissions shall be determined by a stack test on one representative turbine. Testing shall be performed

each federal fiscal year, no later than September 30th. [Rule 62-296.570(4)(a)3, and (4)(b)5., F.A.C.]”

Teresa, I appreciate your consideration of these comments. Should you have any questions, or wish to discuss any of these items further, please do not hesitate to contact me at (561) 691-7058.

Very truly yours,



Richard Piper
Repowering Licensing Manager
Florida Power and Light Company

CC: File
SD
NPS
EPA



FPL

June 16, 1999

Ms. Teresa Heron, P.E.
New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

RECEIVED

JUN 21 1999

BUREAU OF
AIR REGULATION

**RE: FPL Fort Myers Combustion Turbine Inlet Foggers
Proposed Permit 0710002-005-AC**

Dear Teresa:

Enclosed pursuant to Clair Fancy's correspondence of May 25, 1999, please find one copy of the Proof of Publication for the subject inlet foggers at the Fort Myers facility. The Notice of Intent was published on June 8, 1999.

FPL does intend to offer comments on the proposed permit; these will be provided in the next few days.

Should you have any questions, please do not hesitate to contact me at (561) 691-7058.

Very truly yours,

Richard Piper
Repowering Licensing Manager
Florida Power and Light Company

cc: File
SD
EPA
NPS

RECEIVED

JUN 21 1999

BUREAU OF AIR REGULATION

NEWS-PRESS

Published every morning — Daily and Sunday
Fort Myers, Florida

Affidavit of Publication

STATE OF FLORIDA
COUNTY OF LEE

Before the undersigned authority, personally appeared
Brenda Leighton

who on oath says that he/she is the
Legal Coordinator of the News-Press, a

daily newspaper, published at Fort Myers, in Lee County, Florida; that the
attached copy of advertisement, being a
public notice

in the matter of Air Construction Permit

in the _____ Court
was published in said newspaper in the issues of
June 8, 1999

Affiant further says that the said News-Press is a paper of general circulation
daily in Lee, Charlotte, Collier, Glades and Hendry Counties and published at
Fort Myers, in said Lee County, Florida and that said newspaper has heretofore
been continuously published in said Lee County, Florida, each day, and has
been entered as a second class mail matter at the post office in Fort Myers in
said Lee County, Florida, for a period of one year next preceding the first
publication of the attached copy of the advertisement, and affiant further says
that he/she 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.

Brenda Leighton

Sworn to and subscribed before me this
8th day of
June, 1999 by
Brenda Leighton

who is personally known to me or who has produced

as identification, and who did or did not take an oath.
Notary Public *Janet E. Cobb*
Print Name _____

My Commission Expires:

CLASS-16



Janet E. Cobb
MY COMMISSION # CC602535 EXPIRES
November 19, 2000
BONDED THRU TROY FAIN INSURANCE, INC.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP. File No. 0710002-005-AC
Florida Power & Light Company
Units 003-014 Inlet Fogger Project
Lee County
The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Florida Power & Light (FPL). The permit is to install foggers at the compressor inlet of twelve 63-megawatt No. 2 fuel oil-fired General Electric PG 7821 combustion turbine-electrical generators at the Fort Myers Plant in Lee 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 & Light Company, Post Office Box 430, Fort Myers, Florida 33905.
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 2-4 MW through evaporative cooling of the compressor inlet air. The foggers provide no benefit on very humid or cold days and will not be used under those conditions. Maximum power production and emissions will continue to occur at low temperature conditions with the foggers turned off. The result is that maximum hourly emissions will not increase although actual annual emissions will increase because more fuel will be used on hot, relatively dry days.
The number of days during which the foggers can economically operate probably limits emissions increases to levels of low significance for the purposes of PSD applicability. FPL, however, proposes enforceable conditions to insure non-applicability. Each unit is already allowed to operate continuously (8760 per year) but typically operates less than 300 hours. The foggers may not be used more than 500 hours at each unit, but will typically operate for fewer hours than allowed. The units are not presently subject to 40CFR60, Subpart GG, Standards of Performance for Stationary Gas Turbines. The Department has preliminarily determined that the project will not trigger applicability of Subpart GG, but has requested that EPA make the final determination on the matter.
The maximum increase in annual emissions caused by this project in tons per year is summarized below along with PSD-significant levels.
Pollutants Annual Emission Increase PSD Significant Levels

PM/PM/10/2/2015
 SO2 24 40
 NOX 34 40
 VOC 1 40
 CO 3 100

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 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. 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 the 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 Statute 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 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 termination (hearing) under Section 120.569 and 120.57 F.S. or to intervene in this proceeding and participate as a party to it. Any compliance with Rule 28-106.205 of the Florida Administrative Code petition that disputes the material facts upon 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 determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of the 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, South District Office, 2295 Victoria Avenue, Suite 364, Ft. Myers, FL 33902-2549. Telephone: 941/332-4969, Fax: 941/332-5963.

The complete project file includes the application, technical evaluation, Draft Permit, 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.
 Jun 8 No. 27334



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

May 27, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. Douglas Neeley, Chief
Air, Radiation Technology Branch
US EPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: DEP File No. 0710002-005-AC
Fort Myers Plant Units 3-14, Inlet Foggers
Subpart GG Non-Applicability

Dear Mr. Neeley:

Enclosed is a copy of our Intent to Issue a permit to Florida Power and Light (FP&L) for the installation of inlet foggers for use during the summer season on the simple cycle peaking units at the Ft Myers Plant. We request your concurrence with our preliminary determination or your own separate determination regarding the non-applicability of the 40CFR 60, NSPS Subpart GG for these units.

There are presently 12 GE PG7821 combustion turbines on the site. Each has a nominal capacity of 63 megawatts. The units are permitted to operate continuously, but have historically operated 300 hours per year or less. 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 2-4 MW through evaporative cooling of the compressor inlet air. The foggers provide little or no benefit on humid or cold days and will not be used under those conditions.

The foggers will not increase the maximum short-term emission rates for the units, as these are already achieved under natural conditions of low ambient temperatures without the use of the foggers. Therefore the Department believes that Subpart GG is not triggered by the project.

We would appreciate your early review and concurrence. If you have any questions on these matters please call me at 850/921-9523.

Sincerely,

A. A. Linero, P.E., Administrator
New Source Review Section

AAL/aal

Enclosures

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):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Doug Nealey, Chief
 Air Branch
 NE EPA Region IV
 61 Forsyth St.
 Atlanta, GA 30303

4a. Article Number

2333 618 155

4b. Service Type

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

7. Date of Delivery

6-7-89

5. Received By: (Print Name)

Bruce Ashe

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

6. Signature: (Addressee or Agent)

X

Thank you for using Return Receipt Service.

Z 333 618 155

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to		D. Nealey
Street & Number		EPA
Post Office, State, & ZIP Code		Atlanta GA
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		5-27-99
		0710002-005-AE
		Inlet Foggers

PS Form 3800, April 1995



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

May 25, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William Reichel, Plant General Manager
Florida Power & Light
Post Office Box 430
Ft. Myers, Florida 33905

Re: DEP File No. 0710002-005-AC
Fort Myers Plant Units 003-014
Inlet Foggers

Dear Mr. Reichel:

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

The "Public Notice of Intent to Issue Air Construction Permit " must be published one time only, as soon as possible, the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

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 Ms. Teresa Heron at 850/921-9529.

Sincerely,

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

CHF/th

Enclosures

In the Matter of an
Application for Permit by:

Mr. William Reichel, Plant General Manager
Florida Power & Light
Post Office Box 430
Ft. Myers, Florida 33905

DEP File No. 0710002-005-AC
Inlet Foggers Installation
Simple Cycle Units 03-14
Ft. Myers Power Plant

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of DRAFT Permit 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 & Light Company (FPL), applied on March 17, 1999 to the Department to add inlet foggers to twelve simple cycle combustion-electrical generators (Units 003 thru 014) at the Ft Myers Plant in Lee 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 is required to conduct the work.

The Department intends to issue this air construction permit 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." 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 ." 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 (including the PUBLIC NOTICE, Technical Evaluation and Preliminary Determination, and the DRAFT Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5-27-99 to the person(s) listed:

William Reichel, FPL*
Richard Piper, FPL
Phil Barbaccia, DEP SD
Gregg Worley, EPA
John Bunyak, NPS
Ken Kosky, P.E., Golder Associates

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.

Kern Joken
(Clerk)

5-27-99
(Date)

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):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 William Reichel
 FP & L
 P O Box 430
 Ft. Myers, FL
 33905

4a. Article Number
 2 333 618 156

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

7. Date of Delivery
 6-2-99

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)
 X *John P. Musk*

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Z 333 618 156

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to <i>William Reichel</i>	
Street & Number <i>FP & L</i>	
Post Office, State, & ZIP Code <i>Ft. Myers FL</i>	
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 <i>071000a-005-AC 5-27-99</i> <i>Ft. Myers</i>	

PS Form 3800, April 1995

**NOTICE TO BE PUBLISHED
IN THE NEWSPAPER**

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0710002-005-AC

Florida Power & Light Company
Units 003 – 014 Inlet Fogger Project
Lee County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Florida Power & Light (FPL). The permit is to install foggers at the compressor inlet of twelve 63-megawatt, No. 2 fuel oil-fired General Electric PG 7821 combustion turbine-electrical generators at the Fort Myers Plant in Lee 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 & Light Company, Post Office Box 430, Fort Myers, Florida 33905.

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 2-4 MW through evaporative cooling of the compressor inlet air. The foggers provide no benefit on very humid or cold days and will not be used under those conditions. Maximum power production and emissions will continue to occur at low temperature conditions with the foggers turned off. The result is that maximum hourly emissions will not increase although actual annual emissions will increase because more fuel will be used on hot, relatively dry days.

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. FP&L, however, proposes enforceable conditions to insure non-applicability. Each unit is already allowed to operate continuously (8760 per year) but typically operates less than 300 hours. The foggers may not be used more than 500 hours at each unit, but will typically operate for fewer hours than allowed. The units are not presently subject to 40CFR60, Subpart GG, Standards of Performance for Stationary Gas Turbines. The Department has preliminarily determined that the project will not trigger applicability of Subpart GG, but has requested that EPA make the final determination on the matter.

The maximum increase in annual emissions caused by this 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	2	25/15
SO ₂	24	40
NO _x	34	40
VOC	1	40
CO	3	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 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." 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.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

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
South District Office
2295 Victoria Avenue, Suite 364
Ft Myers, Fl 33902-2549
Telephone: 941/332-6969
Fax: 941/332-5963

The complete project file includes the application, technical evaluation, Draft Permit, 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 & Light (FP&L)
700 Universe Blvd
Juno Beach, Florida 33408

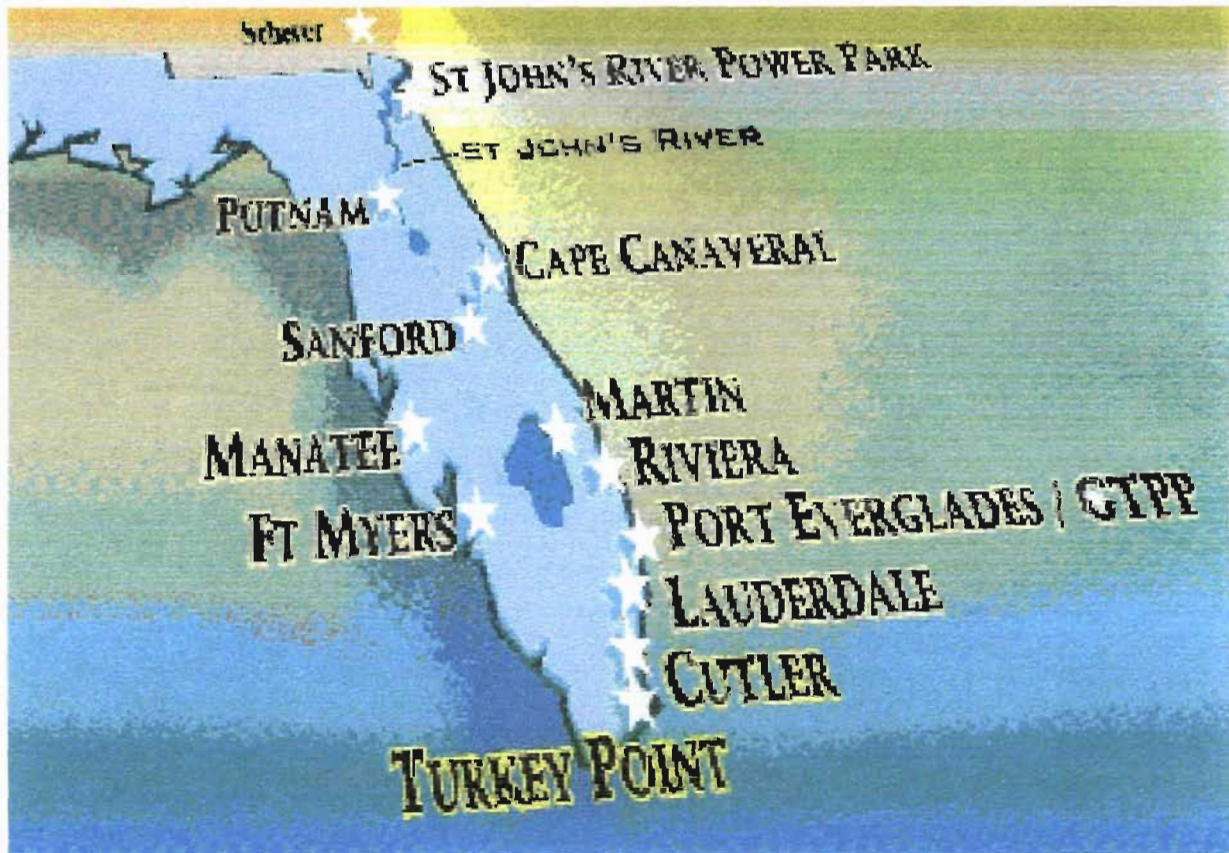
Authorized Representative: William Reichel, Ft Myers Plant General Manager

2. Source Name and Location

FPL Fort Myers Plant
10650 State Road 80
Ft. Myers, Lee County

UTM Coordinates: Zone 17, 422.3 km East and 2952.9 km North

The location of the site within the FPL grid is shown below and a drawing of the plant is shown in the following page.



TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION



3. Source Description

The Florida Power Light (FPL) Ft Myers Plant consists of two Fossil Fuel Fired-Steam Generators (FFSG) and 12 simple cycle gas turbines. FFSG Units 1 and 2 are fired with No.6 Residual Oil. The Department recently approved a repowering project that will increase electrical production from the existing steam turbines while greatly reducing air emissions from historical levels.

The 12 gas turbines (Emission Units 003 thru 014) are each 63 MW General Electric PG7821 combustion turbine-electrical generators. These units are fired with No. 2 distillate fuel or on-specification used oil from FPL operations. Each combustion turbine-electrical generator unit is allowed to operate continuously (8,760 hours per year). These units actually operate as peaking units and typically operate less than 300 hours per year each.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

4. Current Permit and Major Regulatory Program Status

The twelve simple cycle combustion turbines commenced commercial operation in May 1974. These twelve peakers and the other two conventional units at the plant are operated under Title V Air Operation Permit No. 0710002-001-002-AV issued in December 31, 1997.

According to the Title V permit, these combustion turbines are not subject to 40 CFR 60, 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.

5. Permit Modification Request

On March 17, 1999 the Department received a request from FPL for a permit to install foggers at the compressor inlets of Emissions Units 003 through 014. 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 2-4 MW through evaporative cooling of the compressor inlet air. 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 whether or not subject to Prevention of Significant Deterioration or Best Available Control Technology.

6. Emissions Increases Due to Modification/Method of Operation

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.

The maximum short-term emissions increases were estimated by FPL using the heat input associated with a 16 degree F decrease in compressor inlet temperature. The maximum annual increases were estimated by FPL using the annual average inlet cooling of 8 degrees F. The increase in heat-input rate as a function of temperature was estimated by the applicant as 2 mmBtu for every degree F temperature decrease. This was then used with the hours of operation to calculate the increases of each pollutant in tons per year. The results were estimated by FPL and are summarized below together with annual emission increase estimates. These are based on 500 hours of operation per fogger per year (6000 hr/yr for all 12 units) and use of No. 2 fuel oil.

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

Pollutant	Emission Rate lb/mmBtu	Annual Increase tons/yr	PSD Threshold tons/yr
NO _x	0.698	33.5	40
PM/PM ₁₀	0.038	1.8	25/15
CO	0.048	2.3	100
VOC	0.017	0.8	40
SO ₂	0.055	24.2	40

The emissions increases calculated are the direct result from the physical change in or change in method of operation, i.e. the installation and use of the inlet foggers. These assume that the ability to

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

achieve greater power output when the foggers are used does not result in emissions increases outside the turbines original power curve. The rationale is discussed below.

The emissions characteristics (GE performance curves) do not change as a result of the use of the foggers from what would normally occur throughout the entire range of temperatures and relative humidity. Rather, the foggers move the operating points along the same curve toward the power and emissions that normally occur at lower temperatures. The worst case emissions scenario will still occur during the winter months and will occur with the foggers off. This is because of the higher air density and mass flow during cold weather allows higher heat input and power output. At low temperature, very little cooling can be attained because cold air cannot evaporate and hold much moisture. Under such conditions, icing can occur which is detrimental to the units.

7. Evaluation of PSD Applicability

As a major source, a modification or change in method of operation of Emissions Units 003 thru 014 resulting in **significant net emissions increases** (major modification) is subject to PSD review. Significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

*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.*

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

(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.

According to information in the Department's emission database and information provided by FPL, there has been increased annual usage of these units over the years as shown below. Annual actual hours of operation since 1993 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>
All Units	84	48	543	507	555	3,334

There was an increase during 1995-97 compared with 1993-94 and a big increase in 1998 compared to previous years. Despite the relatively large increase in 1998, the usage represents little more than 3 percent of the allowable annual operation.

As it can be seen from the Table, recent hours of operation have increased. They are actually fairly high compared with the historically low levels of operation characteristic of these peaking units. Among the reasons for the relatively high levels since 1995 are the very hot summers, especially in 1998, and the recognized low electrical power reserve margin in the State. These units are allowed to operate continuously.

If these 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

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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."

The FP&L 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 units began commercial operation in 1974. 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. The future actual emissions based on potential to emit and estimated through the use of increases in heat input associated with the use of the fogging system are below the PSD significant levels.

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, FPL proposes to limit operation of the foggers to 6000 hours per year (total of 500 hours per unit). This value, 500 hr/yr/unit, is approximately equal to the recent historical hours of operation for all units. It is also a clear indication that compressor air inlet cooling will not cause the units to operate all of the permitted hours (8760) during this mode. 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. Evaluation of NSPS , Subpart GG Applicability

As a major source, a physical change in or change in the method of operation resulting in an increase in the amount of any air pollutant (which a standard applies) is subject to applicable requirements of 40 CFR 60, Standards of Performance for New Stationary Sources. Modification under 40 CFR 60.2 [Rule 62.204.800 F.A.C.] is defined as follows:

Modification means any physical change in, or change in the method of operation of, an existing facility which increase the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emissions of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

The installation of the foggers does not change maximum short-term emissions rates as these are already achieved under natural conditions of low ambient temperatures without the use of the foggers. The inlet fogger installations only changes the ambient conditions that do occur during the

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

normal operation of the turbines. Therefore, the inlet foggers installation do not make the combustion turbines subject to 40 CFR 60 Subpart GG because, the physical change in or change in the method of operation of, caused by the foggers installation does not increase the (maximum short-term) amount of any air pollutant. The Department will request EPA concurrence on this matter.

9. Emission Summary

The Department issued a non PSD (net out of PSD review) permit for the 1500 MW repowering project in 1998. The net emissions increase/decrease for all PSD pollutants as a result of the repowering modification are calculated below:

REPOWERING CONTEMPORANEOUS CREDITABLE CHANGES (TPY)

Pollutants	Past Emissions (Units 1 and 2)	Future Emissions (Repowered)	Increase (decrease)	PSD Significance	PSD Review?
PM/PM ₁₀	607	313	(294)	25/15	No
SAM	915	21	(894)	7	No
SO ₂	20,561	137	(20,424)	40	No
NO _x	7,095	1,845	(5,250)	40	No
VOC	47	82	35	40	No
CO	1,507	1,267	(240)	100	No

Under the PSD regulations, Rule 62-212.400 (2)(e), F.A.C., these two projects are considered contemporaneous. However, since the decrease from the repowering project is so large, the contemporaneous emissions increases from the inlet fogger project are still under PSD significant threshold level. The contemporaneous decreases for this facility as a result of the installation of the foggers are summarized as follows:

INLET FOGGING CONTEMPORANEOUS CREDITABLE CHANGES (TPY)

Pollutants	Repowering (Decrease)	Inlet Foggers Increase	Facility (Decrease)	PSD Significance	PSD Review?
PM/PM ₁₀	(294)	2	(292)	25/15	No
SAM	(894)			7	No
SO ₂	(20,424)	24	(20,400)	40	No
NO _x	(5,250)	34	(5,216)	40	No
VOC	35	1	(34)	40	No
CO	(240)	2	(238)	100	No

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

10. Proposed Addition of New Conditions to Title V and Issuance of a Construction Permit

Thee FPL FT Myers combustion turbines units 003 through 014 do not have construction permits. Appendix H-1, Permit History of the Title V permit lists only one operation permit No. AO36-223496 issued on June 28, 1993. The Department will issue an air construction permit incorporating all applicable requirements stated in the Title V permit and adding a condition authorizing installation and operation of the inlet foggers.

The new condition applicable to the inlet foggers proposed for Units 003 through 014 are shown in the draft construction permit. It limits operation of the inlet foggers to 500 hours per unit per year.

11. Conclusions

The changes authorized by this permit modification will cause increases in historical actual hours of operation but it 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. Therefore, the Department concludes that the 40 CFR60 NSPS Subpart GG is not applicable to these units as a result of the installation of the foggers.

The Department also concludes that PSD is not applicable to this project since the project as presented is not a major modification to a major facility. 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 other 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. The Department has requested EPA's concurrence on applicability of 40 CFR, Subpart GG.

For further details regarding this review, contact:

*A.A. Linero, P.E. Administrator
Teresa Heron, Review Engineer
New Source Review Section
Bureau of Air Regulation
850/488-0114*

PERMITTEE:

Florida Power & Light Co.
Post Office Box 430
Ft. Myers, Florida 33905

Authorized Representative:

Mr. William Reichel

DEP File No.	0710002-005-AC
Project	Emissions Units 003 -014 Inlet Foggers
SIC No.	4911
Expires:	December 31,1999

PROJECT AND LOCATION:

Permit for the installation of inlet foggers on the twelve 63 (gross capacity) megawatt simple cycle General Electric PG7821 combustion turbine-electrical generators Emissions Units 003 thru 014.

The units are located at the FPL Fort Myers Plant, 10650 State Road 80 Fort Myers, Lee County. UTM coordinates are: Zone 17; 422.3 km E and 2952.9 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 APPENDIX MADE A PART OF THIS PERMIT:

Appendix GC Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

AIR CONSTRUCTION PERMIT 0710002-005-AC

FACILITY DESCRIPTION

Currently, this facility generates electric power from two residual fuel oil-fired steam units (FFFSG) with a combined generating capacity of 593 megawatts (MW) and 12 distillate fuel oil-fired simple cycle combustion turbines (SCCT) with a combined net generating capacity of 708 MW. Air construction permit (DEP File 0710002-004-AC) was recently issued to repower the FFFSGs with 6 combined cycle natural gas-fired combustion turbines. It is expected the repowering project to be in operation by the year 2002.

This permitting action is for the installation of inlet foggers at the twelve (12) distillate fuel oil-fired simple cycle combustion turbines that commenced commercial operation in 1974.

This Project is exempt from the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) as discussed stated in the Technical Evaluation and Preliminary Determination dated May 20, 1999.

REGULATORY CLASSIFICATION

This facility, FPL Fort Myers Power Plant, is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).

This facility is a major source of hazardous air pollutants (HAPs) and is also subject to the provisions of Title IV, Acid Rain, Clean Air Act as amended in 1990.

PERMIT SCHEDULE

- xx/xx/99 Notice of Intent published in _____
- 05/26/99 Distributed Intent to Issue Permit
- 03/17/99 Received Application
- 05/07/99 Application deemed complete

RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

- Application received on March 17, 1999.
- Department's Intent to Issue and Public Notice Package dated May 26, 1999.
- FPL's comments dated April 16, and May 7, 1999

PERMIT SPECIFIC CONDITIONS

This permit addresses the following emissions unit(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-003	Combustion Turbine #1
-004	Combustion Turbine #2
-005	Combustion Turbine #3
-006	Combustion Turbine #4
-007	Combustion Turbine #5
-008	Combustion Turbine #6
-009	Combustion Turbine #7
-010	Combustion Turbine #8
-011	Combustion Turbine #9
-012	Combustion Turbine #10
-013	Combustion Turbine #11
-014	Combustion Turbine #12

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are **not** subject to 40 CFR.60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

Each unit has a rated gross capacity of 63 MW. The combustion turbines commenced commercial operation in May, 1974.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential-to-Emit (PTE) Parameters

1. Permitted Capacity. The heat input rate to each combustion turbine shall not exceed 895 MMBtu per hour.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition No. 1]
2. Methods of Operation - Fuels. The only fuels authorized to be burned in these emissions units is No. 2 distillate fuel oil or on-specification used oil from Florida Power and Light Company operations. See specific condition 6. These fuels may be mixed or burned simultaneously.
[Rule 62-213.410, F.A.C.; AO36-223496; and, 0710002-003-AO]
3. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition No. 8]

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

4. Emissions Unit Operating Rate Limitation After Testing. See specific condition 11. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

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

5. Visible Emissions. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.; and, AO36-223496, Specific Condition No. 3]

6. "On-Specification" Used Oil. Only "on-specification" used oil generated by the Florida Power and Light Company in the production and distribution of electricity shall be fired in these emissions units. The total combined quantity allowed to be fired **at this facility** shall not exceed 1,500,000 gallons per calendar year. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" used oil and shall not be fired. See specific conditions 5., 18., and 19.

CONSTITUENT/PROPERTY*	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flashpoint	100 degrees F minimum
PCBs	less than 2 ppm**

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods)

PCBs must be less than **2 ppm for on-specification used oil to be fired in these emissions units. [40 CFR 279.11; AO36-22346; and, 0710002-003-AO]

Excess Emissions

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

8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

AIR CONSTRUCTION PERMIT 0710002-005-AC

Monitoring of Operations

9. Determination of Process Variables.

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

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

[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

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

10. The test method for visible emissions shall be EPA Method 9 *and the test method for nitrogen oxides shall be EPA Method 7*, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

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

12. Applicable Test Procedures.

(a) Required Sampling Time.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation

AIR CONSTRUCTION PERMIT 0710002-005-AC

period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

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

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

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

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. The following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 100 tons per year or more of any regulated air pollutant, other than lead, lead compounds measured as elemental lead, and acrylonitrile. See permit limiting standards and applicable test methods as noted in specific conditions 5., 6., & 10.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit. See specific conditions 13.(a).a. & b., and 14.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible

AIR CONSTRUCTION PERMIT 0710002-005-AC

emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

14. Visible Emissions Testing - Annual and Renewal. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning only liquid fuels for less than 400 hours per year. To meet **permit renewal** requirements, the permittee shall conduct visible emissions tests on 3 (three) of the CTs that did not operate more than 400 hours per year on liquid fuels during the previous five year period.

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

15. Compliance with the “on-specification” used oil requirements, **including an analysis for PCBs**, will be determined from a sample collected from each batch delivered for firing. See specific conditions **6.,18., and 19.**

[Rules 62-4.070 and 62-213.440; and, 40 CFR 279]

Recordkeeping and Reporting Requirements

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

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

17. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

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

18. Records shall be kept of each delivery of “on-specification” used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of “on-specification” used oil fired in these emissions units. On a quarterly basis, for each quarter during which used oil is burned, a report shall be submitted to the Department’s South District office concerning the quantity and analysis of the on-specification used oil burned. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See specific conditions **6.,15., and 19.**

[Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, AO36-223496]

19. The permittee shall include in the “Annual Operating Report for Air Pollutant Emitting Facility” a summary of the “on-specification” used oil analyses for the calendar year and a statement of the total quantity of “on-specification” used oil fired in Combustion Turbines 1 to 12 during the calendar year. See specific conditions **6.,15., and 18.**

[Rule 62-213.440(1)(b)2.b., F.A.C.]

FP & L- Ft Myers Power Plant
Inlet Foggers Installation

Simple Cycle Combustion Turbines
Emissions Units 003 through 014

AIR CONSTRUCTION PERMIT 0710002-005-AC

20. Inlet foggers may be installed at the compressor inlet to each of the twelve General Electric PG7821 combustion turbine-electric generators. The twelve foggers may operate up to 6,000 hours per year in aggregate (average 500 hours per unit per year). Maximum heat input shall not exceed 807 mmBtu/hr/unit and NOx emissions shall not exceed 11.60 lb/hr/unit at 59° F. This maximum heat input rate will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing after the foggers are installed. Thereafter, compliance shall be demonstrated as required in Specific Condition 13.

Applicable Standards and Regulations:

21. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75.

22. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

General and Administrative Requirements

23. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-0114. All documents related to reports, tests, and notifications should be submitted to the DEP South District office, 2295 Victoria Avenue, Suite 364, Ft Myers, Florida 33902-3381 and phone number 941/332-6975.

24. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

25. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

26. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]

27. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212]

AIR CONSTRUCTION PERMIT 0710002-005-AC

28. Permit Extension: *This permit expires on December 31, 1999.* The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rule 62-4.080, F.A.C.].

29. Application for a Modification of Title V Permit: An application for a modification of the Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy sent to the Department's South District office. [Chapter 62-213, F.A.C.]

30. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

31. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's South District office by March 1st of each year.

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 permit also constitutes:
- a) Determination of Best Available Control Technology ()
 - b) Determination of Prevention of Significant Deterioration () ; and
 - c) Compliance with New Source Performance Standards ().
- 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.

Memorandum

Florida Department of Environmental Protection

TO: C. H. Fancy

THRU: Al Linero *aal*

FROM: Teresa Heron *T.H.*

DATE: May 25, 1999

SUBJECT: FP&L Ft. Myers Plant Fogger Project
DEP File No. 0710002-005-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 twelve 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. FP&L proposes to limit operation of the coolers to 500 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. We will request EPA concurrence on NSPS non-applicability.

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

AAL/th

Attachments

Golder Associates Inc.

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



May 6, 1999

9737572-0100

Mr. C.H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

RECEIVED

MAY 07 1999

**BUREAU OF
AIR REGULATION**

Attention: Ms. Teresa Heron

RE: Inlet Foggers – Combustion Turbines 1-12
Florida Power & Light Company (FPL) Fort Myers Plant

Dear Teresa:

0710002-005-AC

This correspondence is submitted to address the Department's information request related to the installation of direct water spray fogging system to the inlet of the Fort Myers gas turbines. The information requested is presented below and in attachments to this correspondence.

1. Information Requested: Please submit additional data to support the statement that the emission rate does not change as a result of inlet fogging.

Information Submitted: As discussed in the application, the use of the direct water spray fogging systems will increase the relative humidity of the gas stream while concomitantly reducing the temperature due to adiabatic cooling of the inlet air. This effect is no different than when the turbine is operated under the same ambient conditions that occurs during the normal course of operation in any year. However, it allows the turbine to operate under such ambient conditions more frequently and thus can effect annual emissions. The influence on the emission rate of increasing the relative humidity and temperature is explained in EPA's Alternative Control Techniques Document – NO_x Emissions from Stationary Gas Turbines (EPA-453/R-93-007, January 1993). In Section 4.2.1.3 the report provides information that indicates emissions of NO_x decrease with increasing relative humidity. Also, the mass emission of NO_x decreases per mass of fuel input. This is also the same as lower emissions per amount electric power generated (since power and fuel input are directly related).

The lower NO_x emissions with increasing relative humidity and lower temperature can be shown using the equation in Section 4.2.1.3; the adjustment equation in 40 C.F.R. Part 60 Subpart GG, Section 60.335(c)(1). Table 1 presents calculation of relative NO_x concentrations for various temperatures and relative humidity. As can be seen from the table the relative NO_x concentration decreases with increasing

humidity and decreasing temperature. The combined effect can be seen in the last column. Please find attached relevant pages from the EPA cited document. This EPA information is supported by the results of the testing performed at the Putnam Plant that indicated no change in emission rate (concentration) when the fogging system was used. These data also demonstrated no statistical change in CO concentrations as well.

The potential applicability of New Source Performance Standards (NSPS) Subpart GG would be dependant on whether the installation of a fogging system is considered a modification under Section 60.14 of 40 C.F.R. 60. The determination is based on whether a physical change resulted in an increase in the emission rate that is expressed in kilograms per hour. The emission rate can be determined using AP-42, materials balance, CEMs or manual stack tests [see paragraphs (1) and (2) of Section 60.14]. The tests must be conducted under representative performance of the facility and that all operating which can effect emissions must be held constant to the maximum degree feasible. As described above, the inlet foggers only changes the ambient conditions that do occur during the normal operation of the turbine. Testing under the requirement to maintain all operating which may effect emissions (i.e., in this case temperature and relative humidity) constant would produce the same result. Thus, the short-term emission rates do not change. Nonetheless, the fogging system does increase the long-term emissions for which a limit on the operation of the fogging system has been requested to keep the increase below the PSD significant emission rate.

2. Information Requested: In reference to Table 1. Emission Estimates of the Ft. Myers Simple Cycle Combustion Turbines indicate the nominal values for power out, heat rate and heat input.

Information Submitted: The information presented in Table 1 presents the *rate of change* of power, heat rate and heat input for the turbine. The basis of the information is the attached performance curves. As noted from the curves the performance (fuel input and power) is a linear function of inlet temperature. The primary purpose of using the performance curves is to determine the increase in heat rate as a function of temperature. This was determined from the performance curves as 2 mmBtu per °F shown in Table 1. This was then used with the hours of operation to calculate the tons per year. As an example: $2 \text{ mmBtu} / ^\circ\text{F} \times 0.038 \text{ lb/mmBtu} \times 8 \text{ }^\circ\text{F/hour} \times 500 \text{ hours} \times 1 \text{ ton}/2,000 \text{ lb} = 0.15 \text{ tons/year}$ for particulate matter. The 2 mmBtu / °F was determined as follows: At 59 °F the relative fuel consumption is 1 as shown in the performance curve. The heat input is 717.8 mmBtu/hr based on low heating value (LHV). This is multiplied by 1.06 to convert to high heating value (HHV) which gives $717.8 \text{ mmBtu/hr} \times 1.06 = 760.9 \text{ mmBtu/hr}$ at 59 °F. At 80 °F, the fuel consumption is 95% of the 59 °F inlet rating or $0.95 \times 760.9 \text{ mmBtu/hr} = 722.8 \text{ mmBtu/hr}$. The difference is 38.1 mmBtu/hr ($760.9 - 722.8$) over 21 °F ($80 - 59$) or 1.81 mmBtu / °F; this value was rounded up to 2 mmBtu / °F.

3. Information Requested: Submit the heat input curves for these units.

Information Submitted: The heat input curve for the unit is attached.

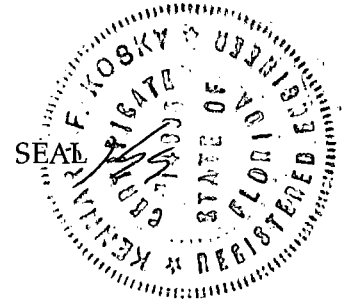
Your prompt review of the application is appreciated. If there are any further questions, please call.

Sincerely,

GOLDER ASSOCIATES INC.



Kennard F. Kosky, P.E.
Principal
Professional Engineer No. 14996



KFK/jkk

Enclosures

cc: Rich Piper, Repowering Licensing Manager
William Reichel, Fort Myers Plant General Manager

G:\DATA\DP\PROJECTS\97\9737\9737572y\F3\#02ltr.doc

Table 1. Relative NO_x Concentrations as a Function of Turbine Inlet Temperature and Relative Humidity using NSPS Equation^a

Temperature (°F)	Relative Humidity (RH) (percent)	Water (grains) per pound of dry Air	Water (grams) per gram of dry Air	Relative NO _x Emission of RH	Temperature (°K)	Relative NO _x Emission of Temp.	Relative NO _x Emission of RH & Temp.
95	40	100	0.0143	0.8597	308	1.1082	0.9527
95	60	150	0.0214	0.7506	308	1.1082	0.8318
95	80	200	0.0286	0.6553	308	1.1082	0.7262
95	100	250	0.0357	0.5722	308	1.1082	0.6341
75	40	64	0.0091	0.9480	297	1.0476	0.9931
75	60	78	0.0111	0.9126	297	1.0476	0.9561
75	80	119	0.0170	0.8165	297	1.0476	0.8554
75	100	130	0.0186	0.7925	297	1.0476	0.8302
59	40	30	0.0043	1.0396	288	1.0000	1.0396
59	60	44	0.0063	1.0008	288	1.0000	1.0008
59	80	60	0.0086	0.9583	288	1.0000	0.9583
59	100	72	0.0103	0.9276	288	1.0000	0.9276
40	40	15	0.0021	1.0828	277	0.9445	1.0227
40	60	23	0.0033	1.0595	277	0.9445	1.0007
40	80	30	0.0043	1.0396	277	0.9445	0.9819
40	100	36	0.0051	1.0228	277	0.9445	0.9660

^a As provided in 40 C.F.R Part 60, Section 60.335(c)(1)

Note: water content (mass) per mass of dry air obtained from standard psychrometric chart.

**Alternative Control
Techniques Document--
NO_x Emissions from Stationary
Gas Turbines**

Emission Standards Division

**U. S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711
January 1993**

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL
INFORMATION SERVICE
SPRINGFIELD, VA 22161

substantially lower thermal NO_x emissions than natural gas or DF-2.¹⁸ For fuels containing FBN, the fuel NO_x production increases with increasing levels of FBN.

4.2.1.3 Ambient Conditions. Ambient conditions that affect NO_x formation are humidity, temperature, and pressure. Of these ambient conditions, humidity has the greatest effect on NO_x formation.¹⁹ The energy required to heat the airborne water vapor has a quenching effect on combustion temperatures, which reduces thermal NO_x formation. At low humidity levels, NO_x emissions increase with increases in ambient temperature. At high humidity levels, the effect of changes in ambient temperature on NO_x formation varies. At high humidity levels and low ambient temperatures, NO_x emissions increase with increasing temperature. Conversely, at high humidity levels and ambient temperatures above 10°C (50°F), NO_x emissions decrease with increasing temperature. This effect of humidity and temperature on NO_x formation is shown in Figure 4-4. A rise in ambient pressure results in higher pressure and temperature levels entering the combustor and so NO_x production levels increase with increases in ambient pressure.¹⁹

The influence of ambient conditions on measured NO_x emission levels can be corrected using the following equation:²⁰

$$NO_x = (NO_{xO}) (P_r/P_o)^{0.5} e^{19(Ho-0.00633)} (288^\circ K/T_a)^{1.53}$$

where:

NO_x = emission rate of NO_x at 15 percent O₂ and International Standards Organization (ISO) ambient conditions, volume percent;

NO_{xO} = observed NO_x concentration, parts per million by volume (ppmv) referenced to 15 percent O₂;

P_r = reference compressor inlet absolute pressure at 101.3 kilopascals ambient pressure, millimeters mercury (mm Hg);

P_o = observed compressor inlet absolute pressure at test, mm Hg;

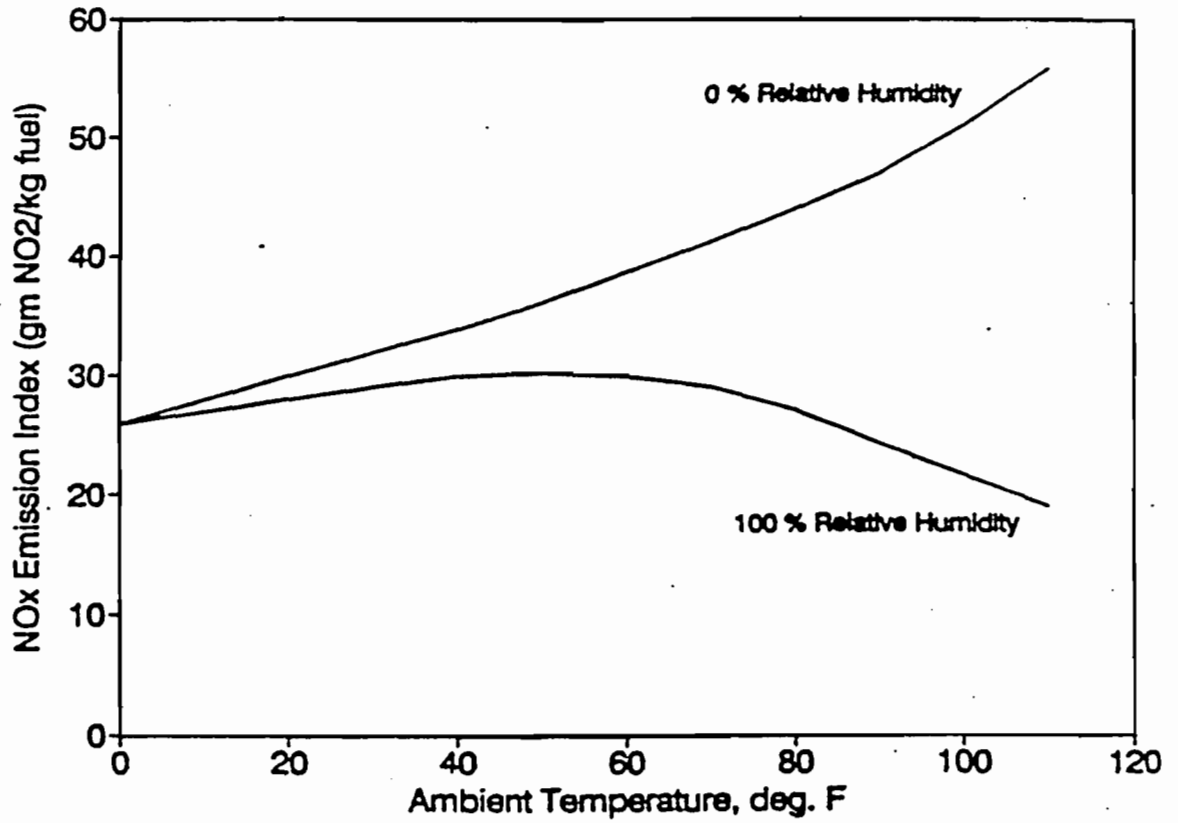


Figure 4-4. Influence of relative humidity and ambient temperature on NO_x formation.¹⁹

H_o = observed humidity of ambient air, g H_2O /g air;

e = transcendental constant, 2.718; and

T_a = ambient temperature, K.

At least two manufacturers state that this equation does not accurately correct NO_x emissions for their turbine models.^{8,12} It is expected that these turbine manufacturers could provide corrections to this equation that would more accurately correct NO_x emissions for the effects of ambient conditions based on test data for their turbine models.

4.2.1.4 Operating Cycles. Emissions from identical turbines used in simple and cogeneration cycles have similar NO_x emissions levels, provided no duct burner is used in heat recovery applications. The NO_x emissions are similar because, as stated in Section 4.2, NO_x is formed only in the turbine combustor and remains at this level regardless of downstream temperature reductions. A turbine operated in a regenerative cycle produces higher NO_x levels, however, due to increased combustor inlet temperatures present in regenerative cycle applications.²¹

4.2.1.5 Power Output Level. The power output level of a gas turbine is directly related to the firing temperature, which is directly related to flame temperature. Each gas turbine has a base-rated power level and corresponding NO_x level. At power outputs below this base-rated level, the flame temperature is lower, so NO_x emissions are lower. Conversely, at peak power outputs above the base rating, NO_x emissions are higher due to higher flame temperature. The NO_x emissions for a range of firing temperatures are shown in Figure 4-3 for one manufacturer's gas turbine.¹⁷

4.2.2 NO_x Emissions From Duct Burners

In some cogeneration and combined cycle applications, the exhaust heat from the gas turbine is not sufficient to produce the desired quantity of steam from the HRSG, and a supplemental burner, or duct burner, is placed in the exhaust duct between the

GENERAL ELECTRIC MODEL PG7821; 65,600 KW GAS TURBINE PACKAGE POWER PLANT
ESTIMATED PERFORMANCE

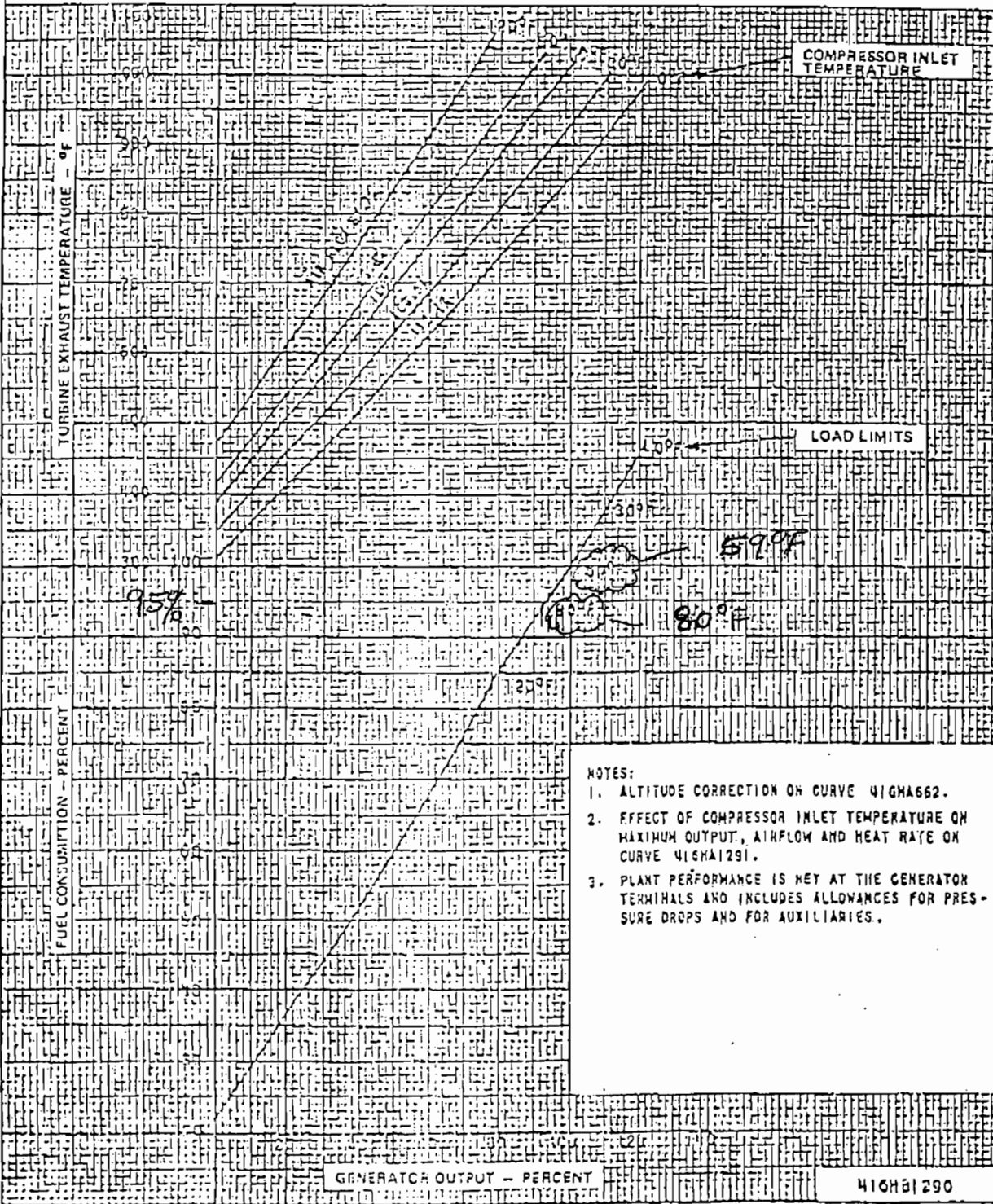
COMPRESSOR INLET TEMPERATURE 59°F BAROMETRIC PRESSURE 14.7 PSIA

FUEL		NATURAL GAS
DESIGN OUTPUT	KW	65,600
DESIGN HEAT RATE (LHV)	BTU/KW-HR	10,900
DESIGN FUEL CONSUMPTION (LHV)	BTU/HR	726.8x10 ⁶
HEATING VALUE RATIO	HHV/LHV	1.11
DESIGN AIR FLOW	LBS/HR	
DESIGN SHAFT SPEED	RPM	

DISTILLATE OIL
DESIGN OUTPUT
DESIGN HEAT RATE (LHV)
DESIGN FUEL CONSUMPTION (LHV)
HEATING VALUE RATIO
DESIGN AIR FLOW
DESIGN SHAFT SPEED

BY: R. ROENBECK
DATE: 5/15/72
REV:

MODE: PEAK



- NOTES:
1. ALTITUDE CORRECTION ON CURVE 41GHA662.
 2. EFFECT OF COMPRESSOR INLET TEMPERATURE ON MAXIMUM OUTPUT, AIRFLOW AND HEAT RATE ON CURVE 41GHA1291.
 3. PLANT PERFORMANCE IS NET AT THE GENERATOR TERMINALS AND INCLUDES ALLOWANCES FOR PRESSURE DROPS AND FOR AUXILIARIES.

41GHA1290



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

April 16, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Piper
Repowering Licensing Manager
Florida Power & Light Company
Post Office Box 14000
Juno Beach, Florida 33408

Re: Inlet Foggers – Ft. Myers Plant Combustion Turbines 1-12

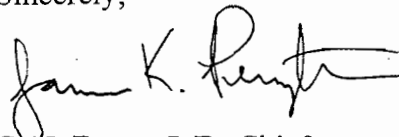
Dear Mr. Piper:

The Department received your application for the installation of the direct water spray fogging system at the Ft. Myers Plant. Based on a technical review, the application is incomplete. Pursuant to Rules 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., please submit the following information, including all relevant reference materials and calculations:

1. Please submit additional data to support the statement that the emission rate does not change as a result of inlet fogging.
2. In reference to Table 1. Emissions Estimates of the Ft. Myers Simple Cycle Combustion Turbines, indicate the nominal values for power output, heat rate and heat input increase.
3. Submit the heat input curves for these units.

Please contact Teresa Heron at 850/921-9529 if you have any questions.

Sincerely,


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

cc: Ken Kosky, P.E
Phil Barbaccia, SWD

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):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Richard Piper
 Repowering Licensing Trgs
 FP + L
 PO BOX 14000
 Juno, Bea, FL 33408

4a. Article Number

2333 618 097

4b. Service Type

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

7. Date of Delivery

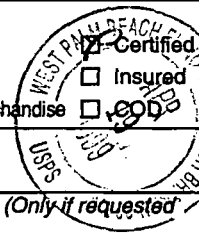
8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)

R. Narsical

6. Signature: (Addressee or Agent)

X



Thank you for using Return Receipt Service.

Z 333 618 097

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to		Richard Piper
Street & Number		FP + L
Post Office, State, & ZIP Code		Juno Bea 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		4-15-99
		Ft. Myers Plant

PS Form 3800, April 1995

RECEIVED

APR 14 1999

**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**BUREAU OF
AIR REGULATION**

In re:

EMERGENCY AUTHORIZATION FOR OPERATION
OF INLET AIR FOGGERS AT THE FORT MYERS
POWER PLANT MADE NECESSARY BY THE
PROJECTED GENERATING CAPACITY SHORTFALL /

OGC CASE NO.: 99-0569

EMERGENCY FINAL ORDER

Under Section 120.569(2)(m) of the Florida Statutes, the State of Florida Department of Environmental Protection (the Department) enters the following Emergency Final Order, including findings of fact and conclusions of law, related to the Fort Myers Power Plant owned by Florida Power and Light (FPL), made necessary by an emergency caused by the early summer weather being experienced in central and south Florida coinciding with the FPL's Martin Power Plant scheduled maintenance outage.

FINDINGS OF FACT

1. Florida Power and Light is an interstate electrical power generator with facilities throughout the State. FPL's Fort Myers Power Plant is located at 10650 SR 80, Fort Myers, Florida.

2. Due to early summer weather being experienced in central and south Florida, combined with FPL's Martin Power Plant scheduled maintenance outage, higher than normal power demand exceeding the energy import capacity of the grid is being experienced in these areas. As a result, changes in operational practices at FPL's Fort Myers Power Plant are necessary to avoid brownouts or blackouts in central and southern Florida.

3. On April 8, 1999, FPL notified the Department that as a result of the shortfall in capacity, an emergency situation exists that will require FPL to operate the inlet air foggers on its

Fort Myers fuel oil fired turbine emission unit numbers 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013 and 014 to generate an additional thirty-five megawatts at the facility.

4. The Department finds that the projected generating shortfall has created a state of emergency threatening the public health, safety and welfare throughout the portions of the State supplied by the FPL Fort Myers Plant that would be adversely affected by the curtailment of electrical energy supply.

5. The Department finds that an emergency authorization for the FPL Fort Myers Power Plant to operate the inlet air foggers on its Fort Myers turbine emission unit numbers 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013 and 014 to generate an additional thirty-five megawatts at the facility is necessary to avoid brownouts and blackouts in central and southern Florida.

CONCLUSIONS OF LAW

1. Section 120.569(2)(m) of the Florida Statutes gives the Department the authority to issue an emergency final order if as agency head, I find that an immediate danger to the public health, safety or welfare so requires and the order recites with particularity the facts underlying that conclusion.

2. Based on the findings recited above, I find and conclude that the emergency caused by the electrical energy generation shortfall requires an immediate order of the Department to protect the public health, safety and welfare.

THEREFORE, IT IS ORDERED:

1. The Florida Power and Light Company may operate the inlet air foggers on its Fort Myers Power Plant turbine emission unit numbers 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013 and 014 to produce an additional thirty-five megawatts at the facility.

2. The Department issues this Emergency Final Order solely to address the emergency created by the electrical energy generation shortfall. This order shall not be construed to authorize any activity within the jurisdiction of the Department except in accordance with the express terms of this order. This order will allow the company to produce additional electrical energy for its customers in the State of Florida and thereby minimize the occurrence of blackouts or brownouts.

3. Nothing in this order shall eliminate the necessity for obtaining any other federal, state, or local permits or other authorizations that may be required.

4. FPL shall operate its Fort Myers Power Plant in accordance with all other conditions of its federal, state, or local permits.

5. This Emergency Final Order shall take effect immediately and expire in thirty days from the date of execution set forth below, or whenever the emergency situation is alleviated, whichever occurs first, unless modified or extended by further order.

NOTICE OF RIGHTS

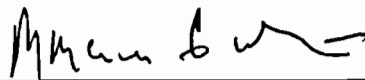
Any party adversely affected by this Emergency Final Order is entitled to judicial review under Section 120.68 of the Florida Statutes. The Florida Rules of Appellate Procedure govern the review proceedings. Such proceedings are commenced by filing one copy of a notice of appeal with the Agency Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Blvd., MS 35, Tallahassee, Florida 32399-3000 and a

CERTIFICATE OF SERVICE

I HEREBY certify that a true and correct copy of this EMERGENCY FINAL ORDER was sent by facsimile to the following person this 9 day of April, 1999:

William M. Reichel
Florida Power and Light Company
Fort Myers Power Plant
10650 State Road 80
Fort Myers, Florida 33905-5903

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Marshall G. Wiseheart
Assistant General Counsel

TRANSACTION REPORT

Broadcast
Transaction(s) completed

NO.	TX DATE/TIME	DESTINATION	DURATION	PGS.	RESULT	MODE
745	APR. 9 15:30	FT MYERS PLT	0° 01' 23"	006	OK	N ECM
	15:36	561 691 7070	0° 02' 32"	006	OK	Normal

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF GENERAL COUNSEL
 3900 Commonwealth Boulevard, M.S. 35
 Marjory Stoneman Douglas Building
 Tallahassee, Florida 32399-3000

FACSIMILE TRANSMITTAL
4/9/99

to: William Reichel / Rich Piper

phone: _____

fax: 941-693-4333 / 561-691-7070

from: Perry Odom

phone: 904/488-9314

fax: 904/487-4938

sender: Rachel

pages: 6 including cover



FPL

RECEIVED

March 12, 1999

MAR 17 1999

**BUREAU OF
AIR REGULATION**

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

**Re: Submittal of Application For Air Construction Permit
FPL Fort Myers Plant**

Dear Al:

0710002-005-AC

Enclosed for your use please find four (4) copies of an application for an Air Construction permit to modify the Fort Myers facility. As we have discussed, this application concerns the installation of inlet foggers at the existing simple-cycle combustion turbines at the plant.

If you should have any question regarding this submittal, please do not hesitate to contact me at (561) 691-7058.

Very truly yours,

Richard Piper
Repowering Licensing Manager
Florida Power and Light Company

Cc: Ken Kosky Golder Associates

RECEIVED

MAR 17 1999

**BUREAU OF
AIR REGULATION**

**APPLICATION FOR AIR PERMIT
INSTALLATION OF DIRECT WATER
SPRAY FOGGING SYSTEMS
FORT MYERS PLANT**

Prepared For:

Florida Power & Light, Inc.
700 Universe Blvd.
Juno Beach, Florida 33408

Prepared By:

Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653

March 1999
9737572Y/F1

DISTRIBUTION:

6 Copies - Florida Power & Light, Inc. (4 signatures, 2 photocopy signatures)
2 Copies - Golder Associates Inc.

PART I
APPLICATION FOR AIR PERMIT
LONG FORM

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

I. APPLICATION INFORMATION

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

Identification of Facility Addressed in This Application

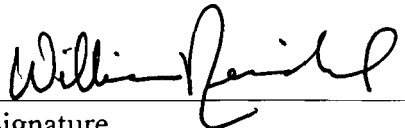
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: Florida Power & Light Company	
2. Site Name: Fort Myers Plant	
3. Facility Identification Number: 0710002 [] Unknown	
4. Facility Location Information: Street Address or Other Locator: 10650 State Road 80 City: Fort Myers County: Lee Zip Code: 33905	
5. Relocatable Facility? [] Yes [x] No	6. Existing Permitted Facility? [x] Yes [] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	March 17, 1999
2. Permit Number:	0710002-005-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: William Reichel, Plant General Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: FPL Fort Myers Plant Street Address: P.O. Box 430 City: Fort Myers State: FL Zip Code: 33905
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 693-4200 Fax: (941) 693-4333
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>3/9/99</u>

* Attach letter of authorization if not currently on file.

Scope of Application

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

Emissions Unit ID		Description of Emissions Unit	Permit Type
Unit #	Unit ID		
1R	003	Combustion Turbine No. 1	AC1B
2R	004	Combustion Turbine No. 2	AC1B
3R	005	Combustion Turbine No. 3	AC1B
4R	006	Combustion Turbine No. 4	AC1B
5R	007	Combustion Turbine No. 5	AC1B
6R	008	Combustion Turbine No. 6	AC1B
7R	009	Combustion Turbine No. 7	AC1B
8R	010	Combustion Turbine No. 8	AC1B
9R	011	Combustion Turbine No. 9	AC1B
10R	012	Combustion Turbine No. 10	AC1B
11R	013	Combustion Turbine No. 11	AC1B
12R	014	Combustion Turbine No. 12	AC1B

See individual Emissions Unit (EU) sections for more detailed descriptions.
Multiple EU IDs indicated with an asterisk (*). Regulated EU indicated with an "R".

Purpose of Application and Category

Check one (except as otherwise indicated):

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

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 renewed: _____

-] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

-] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: _____

Reason for revision: _____

Category II: All Air Construction Permit Applications Subject to Processing Under Rule 62-210.300(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. Give reason for revision; e.g.; to address one or more newly constructed or modified emissions units.

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).

Current operation permit number(s), if any: _____
071002-001-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: _____

Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations: Installation of direct water spray inlet fogging systems. Since the facility holds a Title V permit pursuant to Chapter 62-213 F.A.C., a permit fee is not required. Refer to Part II for discussion.
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14996
2. Professional Engineer Mailing Address: Organization/Firm: Golder Associates Inc. Street Address: 6241 NW 23rd Street, Suite 500 City: Gainesville State: FL Zip Code: 32653-1500
3. Professional Engineer Telephone Numbers: Telephone: (352) 336-5600 Fax: (352) 336-6603

4. Professional Engineer's Statement:

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

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

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

If the purpose of this application is to obtain a Title V source air operation permit (check here [] 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 [X] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

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

Humad F. Kofay

3/3/99

Signature _____ Date _____

Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact: Mr. Richard G. Piper, Repowering Licensing Manager
2. Application Contact Mailing Address: Organization/Firm: FPL Environmental Services Dep. Street Address: 700 Universe Blvd. City: Juno Beach State: FL Zip Code: 33408
3. Application Contact Telephone Numbers: Telephone: (561) 691-7058 Fax: (561) 691-7070

Application Comment

Existing gas turbines Nos. 1 through 12 will be installed with direct water spray fogging systems that will reduce the turbine inlet air temperature. The temperature reduction will improve the heat rate and increase power due to the cooler-denser inlet air. The net emissions change from this project will not result in an increase of any regulated pollutant greater than the PSD significant emission rates. Therefore, PSD review does not apply to proposed project. Refer to Part II for discussion.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 422.3 North (km): 2952.9			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 26 / 41 / 49 Longitude: (DD/MM/SS): 81 / 46 / 55			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment (limit to 500 characters): The existing Fort Myers plant currently consists of 2 Fossil Fuel Fired-Steam Generators (FFSG) and 12 simple cycle gas turbines. FFFSG Unit 1 and 2 are fired with No. 6 Residual Oil and the 12 gas turbines (GT Units 1-12) are fired with No. 2 Distillate Oil. Air construction permit (DEP File No. 0710002-004-AC) was recently issued to repower FFFSG with 6 gas-fired combustion turbines. Refer to Part II for discussion.			

Facility Contact

1. Name and Title of Facility Contact: Mr. Bernie Tibble, Environmental Specialist			
2. Facility Contact Mailing Address: Organization/Firm: FPL Fort Myers Plant Street Address: P.O. Box 430 City: Fort Myers State: FL Zip Code: 33905			
3. Facility Contact Telephone Numbers: Telephone: (941) 693-4390 Fax: (941) 693-4333			

B. FACILITY REGULATIONS

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

[Empty box for Rule Applicability Analysis]

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

Facility emissions covered under existing Title V permit, no additional facility or emission unit applicable requirements as a result of the proposed change.

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information:

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

Facility Pollutant Detail Information:

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID(s): <u>Part II</u> _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached Document ID: _____</p> <p><input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>
<p>15. Compliance Statement (Hard-copy Required)</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>

PART II
SUPPORTING INFORMATION

Part II

Application for Air Permit Installation of Direct Water Spray Fogging Systems Fort Myers Plant

Introduction

Florida Power & Light Company is proposing to install direct water spray fogging systems in the inlet ducts of the existing 12 simple cycle combustion turbines at the Fort Myers Plant. The purpose of the inlet foggers to provide adiabatic inlet air cooling which increase turbine output and decreases heat rate. The project is part of increasing capacity in a cost effective manner.

Description

The direct inlet fogging systems achieve adiabatic cooling using water to form fine droplets (fog). The fog is produced by injection grids placed in the turbine inlet duct that use nozzles that produce a fine spray. The small fog particles (about 10 to 20 microns) extract the latent heat of vaporization from the gas stream when the water droplet is converted to gas. Heat is removed at a rate of 1,075 Btu/lb of water. The result of the fogging is a cooler more moisture laden air stream. Figure 1 presents a schematic of a typical fogging system.

The amount of heat removed is highly dependent upon the ambient air conditions. The two most important parameters are the dry bulb temperature and relative humidity. As moisture is added to the inlet air by the fogging, the vaporization of the fog droplets cools the air toward the wet-bulb temperature. For the proposed project, the design condition is 95°F and 50 percent relative humidity. The resultant wet bulb temperature, based on psychrometric charts is 79°F. At 100 percent saturation the inlet cooling system would result in a 16 °F decrease of the turbine inlet air.

While adiabatic cooling is most efficient for dry climates, adiabatic cooling in Florida can be an effective means of inlet air cooling during the late morning to evening hours. This period is typically 8 to 10 hours per day from about 10 a.m. to 8 p.m. In the early morning hours

and evening hours, the typical relative humidity in Florida is 70 to 90 percent depending on the climatic conditions. Because of the highly variable nature of ambient air conditions, the annual average inlet cooling was assumed to be 8°F. This average was reviewed against a 30 year record of meteorological data for Fort Myers and found to be representative of the range in conditions that occur over an annual period. This includes cooling associated with the typical mid-afternoon summer days and early morning/evening periods that occur year-round. The typical mid-afternoon cooling for Fort Myers would be 13°F and would occur in August with a mid-afternoon temperature of 91 °F and 60 percent relative humidity. During January, the mid-afternoon cooling would be about 10 °F. The typical cooling that would occur in the early morning hours of evening hours with temperatures of about 80°F and a relative humidity of 80 percent would be 5°F. This cooling also assumes that the gas stream can be 100 percent saturated. The ambient air conditions that are modified by the fogging system occur naturally but are more frequent with the fogging system. For example, the average minimum temperatures for the months of November through April range from 52.5°F to 61.7°F with relative humidities ranging from 88 to 90 percent. The amount of adiabatic cooling would range from only 1 to 2°F and therefore fogging would not be practical.

Turbine Performance and Emission Estimates

The effect of decreasing the turbine inlet air through the use of fogging will be to increase the mass flow of air that can go through the turbine which allows higher heat input and power output. The combustion turbine is also more efficient since the heat rate decreases with decreasing temperature. For the GE Model PG7821 combustion turbines at the Fort Myers plant, an 8°F average decrease in temperature would result in a 2.8 percent increase in power and an associated 1.1 percent decrease in heat rate. Thus, while power increases, the production of power is more efficient with concomitant lower emissions per MW-hr generated. The increase in heat rate as a function of temperature decrease is a linear function and for the Fort Myers turbines would be 2 mmBtu/hr/°F. The data were determined using GE supplied data (see Attachment A).

Because the turbine is operating on its original power curve, the emission characteristics do not change from what would normally occur at that temperature and relative humidity. An evaluation of emissions from the fogging tests conducted at the FPL Putnam plant did not result in any statistically significant differences in emission rates (see Attachment B). The increase in emissions of criteria pollutants associated with fogging were determined using emission limits contained in the Title V Permit for the facility and AP-42 emission factors where no limits are provided. Table 1 presents a summary of the operating conditions and emission increases resulting from fogging. The annual emissions were determined by multiplying the heat input increase times the emissions rate in lb/mmBtu for the number of hours of proposed for the turbines. For the Fort Myers turbines, a maximum of 500 hours of operation for each turbine was used as the basis for annual emission estimates.

Regulatory Applicability

A modification is defined in Rule 62-210.200 Florida Administrative Code (F.A.C.) as any physical change in, or a change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Clean Air Act. A modification to a major source of air pollution, such as the Fort Myers Plant, may be subject to review under the Department's Prevention of Significant Deterioration (PSD) rules codified in Rule 62-212.400 F.A.C.

The proposed installation of direct water spray fogging systems is a modification according to Rule 62-212.200 (188) F.A.C., since annual emissions will potentially increase as a result of the increased power and heat input. This has been confirmed by the Department in its December 31, 1998 correspondence to FPL.

Based on the available data, it is concluded that the emission rate does not change as a result of inlet fogging. Therefore, increase in annual potential emissions can be conservatively determined through the use of increases in heat input associated with the use of the fogging systems. For the 12 combustion turbines the maximum potential annual increase in emissions is estimated as follows:

Summary of Maximum Annual Emissions - All Units - 12 CTs at 500 hours/year

<u>Pollutant</u>	<u>Tons/Year</u>
PM	1.82
NO _x	33.50
SO ₂	24.24
CO	2.30
VOC	0.82

These maximum potential emission rates are less than the significant emission rates in Table 62-212.400-2 in Rule 62-212.400 F.A.C. and therefore PSD would not apply.

FPL proposes that the amount of fogging allowed by the Department be based on a cumulative amount of operating hours for the 12 combustion turbines. This would amount to 6,000 hours of operation. As described previously, the emission rates would not be affected.

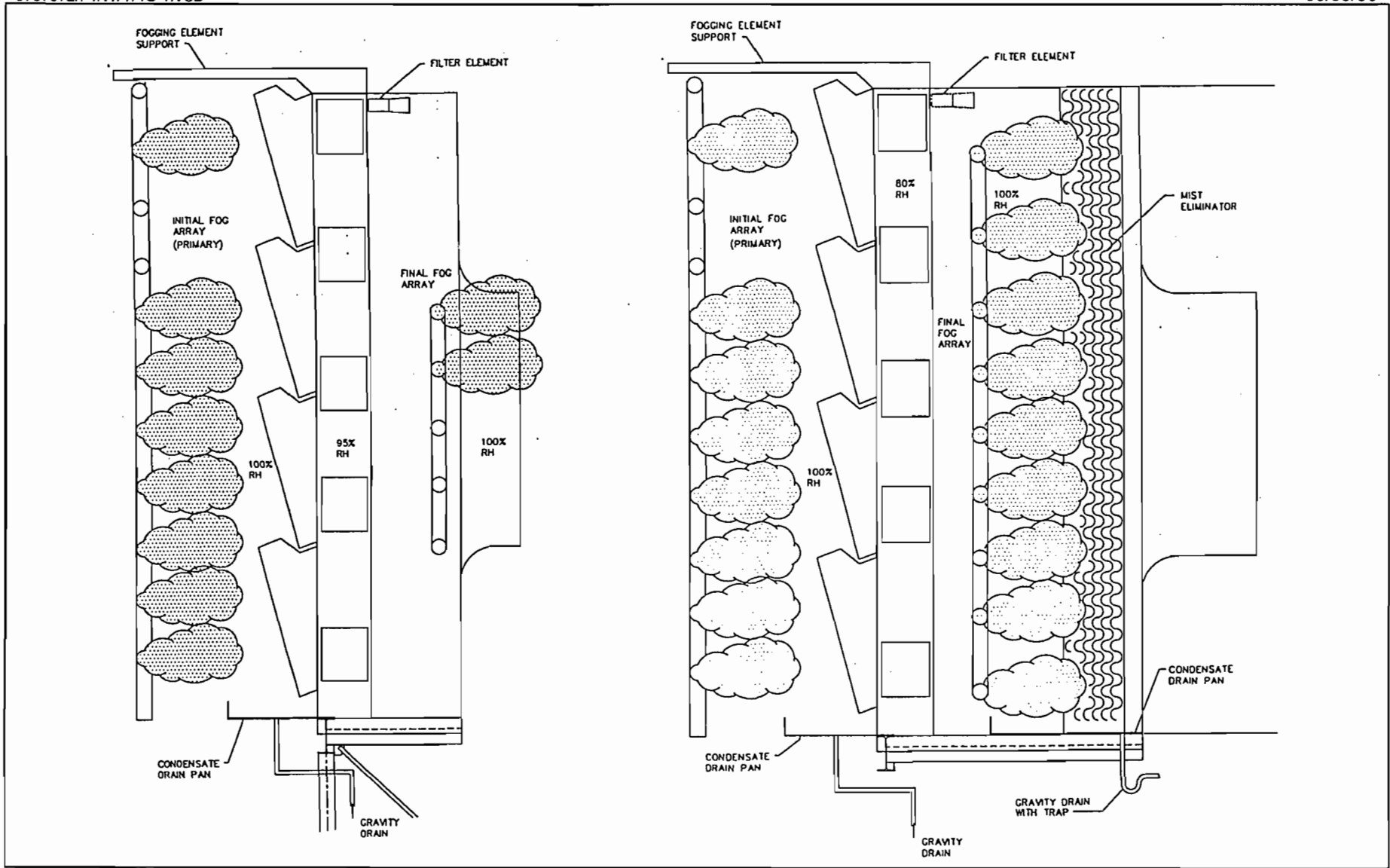


Figure 1. Illustrative Fogging System Schematic
Florida Power & Light, Inc.

Source: Caldwell Energy and Environmental, Inc.



ATTACHMENT A

Attachment A

The following data were obtained from performance curves in the range that fogging would be most effective.

Plant Site: Fort Myers Plant; GTs Nos. 1-12
Turbine Model: GE Model PG7821

Turbine Inlet Temperature (°F)	80	59
Difference (°F)		21
Heat Input (mmBtu/hr)	766	807
Difference (mmBtu/hr)		40.338
Rate (mmBtu/hr/ °F) ^a		1.92

Note: ^a heat input difference divided by temperature difference.

ATTACHMENT B

Golder Associates Inc.

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



December 15, 1998

9737572A/1

Florida Power & Light Company
700 Universe Blvd.
P.O. Box 14000
Juno Beach, Florida 33408

Attention: Mr. John Hampp, Environmental Specialist

RE: Putnam Inlet Fogging Emission Tests
Analysis of Data

Dear John:

Golder Associates Inc. has evaluated the emissions data taken during August 25 and 26, 1998 to determine the potential effect of inlet fogging on emission rates of nitrogen oxides (NO_x) and carbon monoxide (CO). The data were obtained at the Putnam Plant using various inlet fogging conditions while operating the unit at nearly constant heat input. The heat input during testing on August 25, 1998 varied by less than 1.5 percent while heat input during testing on August 26, 1998 varied by about 2.5 percent. The data evaluated represented 178 individual 3 minute readings using continuous emission monitoring equipment. There were 72 data points when the inlet foggers were not operating (i.e., "off") while there were 106 data points where the various foggers were operating (i.e., "on").

The data were evaluated using the procedures in Appendix C to 40 CFR Part 60; Determination of Emission Rate Change. The data were also evaluated in terms of the potential effect of inlet fogging. Tables 1.1a and 1.1b present the results of Appendix C evaluation for NO_x and CO, respectively for the data recorded on August 25, 1998. Tables 1.2a and 1.2b present the results of Appendix C evaluation for NO_x and CO, respectively for the data recorded on August 26, 1998. Taken together, the analysis suggests that NO_x concentrations may decrease slightly while CO may increase slightly with the operation of inlet foggers. However, the trend was not always consistent and the differences are small (i.e., up to a few ppm). Other factors also likely played a role in the variability of the data such as the response in continuous emission monitoring equipment, fuel input, ambient temperature and combustion turbine operation variability. Such changes, which cannot be completely accounted for in the data, would make it inappropriate to develop a specific relationships regarding emission rates at this time. Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

A handwritten signature in black ink that reads "Kennard F. Kosky".

Kennard F. Kosky, P.E.
Principal

KFK/arz

Table 1.1a Florida Power And Light (FP&L) Test data for the Combustion Turbine
Inlet Air Cooling System with Direct Water Spray Inlet Fogging (8/25/98)
NO_x Statistical Analysis (Unit 1GT2 - Putnam Plant, Palatka, FL.)

Hour Range	Fogger on/off	n	v (n-1)	Mean	Std Dev	t	95% C.I.	Upper C.I.	Lower C.I.
1345-1421	off (baseline)	13	12	87.8	0.98	1.782	0.485	88.3	87.4
1424-1521	on	20	19	86.5	1.33	1.729	0.514	87.0	85.9
1524	off	1	0	-	-	-	-		
1527-1533	on	3	2	89.0	0.35	2.92	0.592	89.6	88.4
1536-1539	off	2	1	88.5	0.78	1.86	1.023	89.5	87.4

Legend: n= sample size, v = sample size -1, t=t distribution

Table 1.1b Florida Power And Light (FP&L) Test data for the Combustion Turbine
Inlet Air Cooling System with Direct Water Spray Inlet Fogging (8/25/98)
CO Statistical Analysis (Unit 1GT2 - Putnam Plant, Palatka, FL.)

Hour Range	Fogger on/off	n	v (n-1)	Mean	Std Dev	t	95% C.I.	Upper C.I.	Lower C.I.
1345-1421	off (baseline)	13	12	75.9	2.90	1.782	1.433	77.4	74.5
1424-1521	on	20	19	81.0	1.43	1.729	0.554	81.5	80.4
1524	off	1	0	-	-	-	-		
1527-1533	on	3	2	78.0	2.00	2.92	3.372	81.4	74.6
1536-1539	off	2	1	79.5	2.12	1.86	2.790	82.3	76.7

Legend: n= sample size, v = sample size -1, t=t distribution

Table 1.2a Florida Power And Light (FP&L) Test data for the Combustion Turbine Inlet Air Cooling System with Direct Water Spray Inlet Fogging (8/26/98) NO_x Statistical Analysis (Unit 1GT2 - Putnam Plant, Palatka, FL.)

Hour Range	Fogger on/off	n	v (n-1)	Mean	Std Dev	t	z	95% C.I.	Upper C.I.	Lower C.I.
1103-1227	off (baseline)	29	28	89.1	0.7	1.701	-	0.236	89.4	88.9
1230-1430	on	41	-	90.5	1.3	-	1.645	0.334	90.8	90.2
1433-1539	off	23	-	96.8	1.3	1.717	-	0.466	97.3	96.4
1542-1745	on	42	-	92.4	2.2	-	1.645	0.561	93.0	91.9
1748-1800	off	5	4	97.7	0.4	2.132	-	0.429	98.1	97.3

Legend: n= sample size, v = sample size -1, t=t distribution, z = z distribution (used when sample size is >30)

Table 1.2b Florida Power And Light (FP&L) Test data for the Combustion Turbine Inlet Air Cooling System with Direct Water Spray Inlet Fogging (8/26/98) CO Statistical Analysis (Unit 1GT2 - Putnam Plant, Palatka, FL.)

Hour Range	Fogger on/off	n	v (n-1)	Mean	Std Dev	t	z	95% C.I.	Upper C.I.	Lower C.I.
1103-1227	off (baseline)	29	28	72.6	2.3	1.701	-	0.728	73.3	71.9
1230-1430	on	41	-	70.9	1.9	-	1.645	0.494	71.4	70.4
1433-1539	off	23	-	67.2	1.9	1.717	-	0.688	67.9	66.5
1542-1745	on	42	-	69.5	3.3	-	1.645	0.828	70.4	68.7
1748-1800	off	5	4	63.4	0.9	2.132	-	0.853	64.3	62.5

Legend: n= sample size, v = sample size -1, t=t distribution, z = z distribution (used when sample size is >30)

Table 1. Emission Estimates of the Fort Myers Simple Cycle Combustion Turbines with Inlet Air Cooling System with Direct Water Spray Inlet Fogging (No. 2 Fuel Oil Combustion)

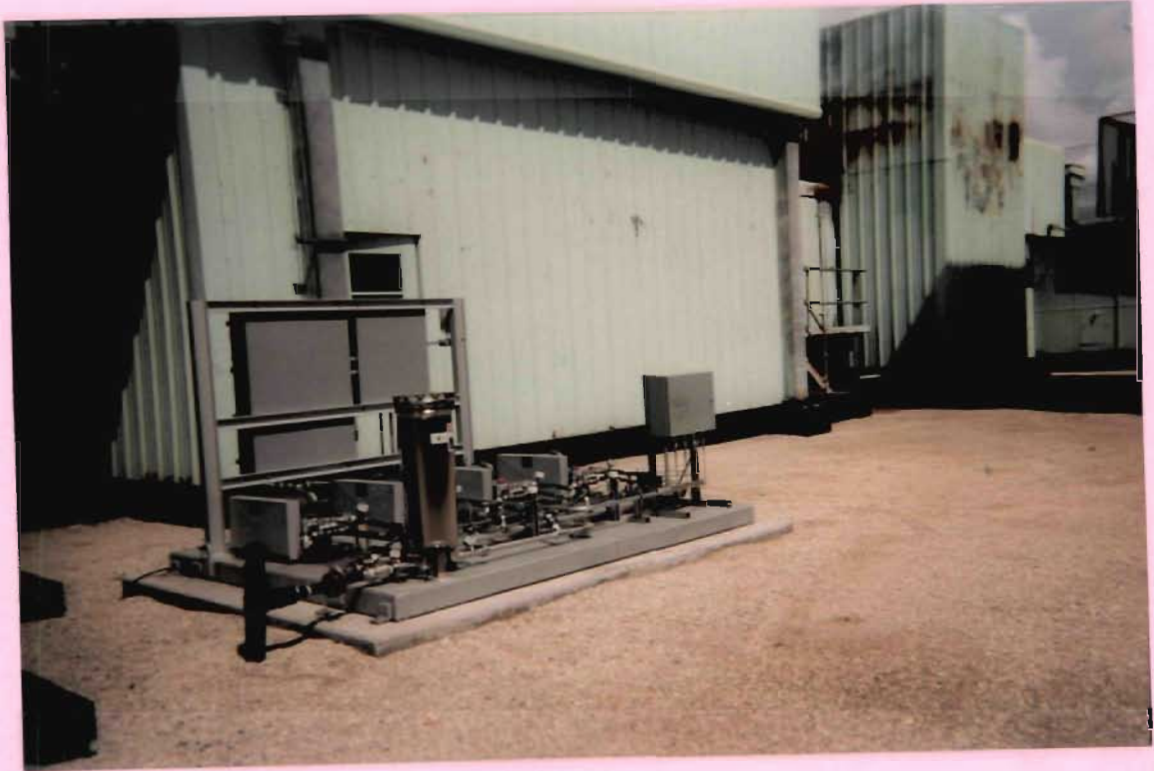
Performance Basis	Units	Emissions	Comments
Temperature Decrease	°F (1)	8	
Power Increase		2.83%	GE Curves
Heat Rate Decrease		1.06%	GE Curves
Heat Input Increase		2.08%	GE Curves
Heat Input Change	mmBtu/ °F	2	GE Curves
Hours/year		500 (2)	
Pollutants	Units	Emissions (3)	Comments
PM	lb/MMBtu TPY	0.038	AP-42 Section 3.1 per machine
		0.15	
NO _x	lb/MMBtu TPY	0.698	AP-42 Section 3.1 per machine
		2.79	
SO ₂	lb/MMBtu TPY	0.505	AP-42 Section 3.1 (S=0.5%) per machine
		2.02	
CO	lb/MMBtu TPY	0.048	AP-42 Section 3.1 per machine
		0.19	
VOC	lb/MMBtu TPY	0.017	AP-42 Section 3.1 per machine
		0.07	

Legend - TPY: tons per year

(1) Temperature decrease is average annual temperature differential of ambient temperature to compressor inlet temperature utilizing inlet fogger.

(2) Hours of fogger operation based on estimate of 8 hours per day and 75 days per year.

(3) Emission factor references - Title V Permit No. 0710002-001-AV, EPA AP-42 Emission Factors Section 3.1 "Stationary Gas Turbines".



Ft Myers



Ft. Myers



Ft. Myers

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

FPL Ft Myers
Fogger
Permit

FPL
pix of
Ft. Myers Plant
active
inactive

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):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Richard Piper, RLM
 FP & L
 PO Box 14000
 Juno Beach, FL
 33408

4a. Article Number

Z 031 391 904

4b. Service Type

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

7. Date of Delivery

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

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X *[Signature]*



Thank you for using Return Receipt Service.

Z 031 391 904

US Postal Service
Receipt for Certified Mail

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

Sent to: <i>Richard Piper</i>	
Street & Number: <i>FP & L</i>	
Post Office, State, & ZIP Code: <i>Juno Beach, FL</i>	
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	<i>12-17-99</i>
<i>0710002-005-AC</i>	

PS Form 3800, April 1995

1 From (please print and press hard)

Date 7-20-99 Sender's FedEx Account Number _____

Sender's Name TERESA HERON Phone or 921-9533 (850) 921-9529

Company FLORIDA DEPT OF ENV. PROTECTION

Address 2600 BLAIR STONE ROAD - Air Div. Dept./Floor/Suite/Room _____

City TALLAHASSEE State FL ZIP 32399-2400

2 Your Internal Billing Reference Information (Optional) (First 24 characters will appear on invoice)

3 To (please print and press hard)

Recipient's Name RICHARD PIPER Phone (561) 691-7058

Company FPL 0710002-005-AC - Ft. Myers

Address 700 UNIVERSE BLVD (To "HOLD" at FedEx location, print FedEx address here) (We Cannot Deliver to P.O. Boxes or P.O. ZIP Codes) Dept./Floor/Suite/Room _____

City JUNO BEACH State FL ZIP 33408

For HOLD at FedEx Location check here Hold Weekday (Not available with FedEx First Overnight) Hold Saturday (Available for FedEx Priority Overnight and FedEx 2Day only) (Not available at all locations)

For WEEKEND Delivery check here (Extra charge applies (Not available at all locations)) Saturday Delivery (Available for FedEx Priority Overnight and FedEx 2Day only) **NEW** Sunday Delivery (Available for FedEx Priority Overnight only)

Service Conditions, Declared Value, and Limit of Liability - By using this Airbill, you agree to the service conditions in our current Service Guide or U.S. Government Service Guide. Both are available on request. SEE BACK OF SENDER'S COPY OF THIS AIRBILL FOR INFORMATION AND ADDITIONAL TERMS. We will not be responsible for any claim in excess of \$100 per package whether the result of loss, damage, or delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, and document your actual loss in a timely manner. Your right to recover from us for any loss includes intrinsic value of the package, loss of sales, interest, profit, attorney's fees, costs, and other forms of damage, whether direct, incidental, consequential, or special, and is limited to the greater of \$100 or the declared value but cannot exceed actual documented loss. The maximum declared value for any FedEx Letter and FedEx Pak is \$500. Federal Express may, upon your request, and with some limitations, refund all transportation charges paid. See the FedEx Service Guide for further details.

Questions?
Call 1-800-Go-FedEx® (800)463-3339

The World On Time

4a Express Package Service Packages under 150 lbs. Delivery commitment may be later in some areas.

FedEx Priority Overnight (Next business morning) FedEx Standard Overnight (Next business afternoon)
 FedEx First Overnight™ (Earliest next business morning delivery to select locations) (Higher rates apply)
 FedEx 2Day (Second business day) FedEx Express Saver (Third business day)
FedEx Letter Rate not available. Minimum charge: One pound rate.

4b Express Freight Service Packages over 150 lbs. Delivery commitment may be later in some areas.

FedEx Overnight Freight (Next business day) FedEx 2Day Freight (Second business day) FedEx Express Saver Freight (Up to 3 business days)
(Call for delivery schedule. See back for detailed descriptions of freight services.)

5 Packaging FedEx Letter (Declared value limit \$500) FedEx Pak FedEx Box FedEx Tube Other Pkg.

6 Special Handling (One box must be checked) (No per attached Shipper's Declaration not required)
Does this shipment contain dangerous goods? No Yes Yes (Shipper's Declaration not required)
 Dry Ice (Dry Ice, 9, UN 1845) _____ kg Cargo Aircraft Only
*Dangerous Goods cannot be shipped in FedEx packaging.

7 Payment
Bill to: Sender (Account No. in Section 1 will be billed) Recipient (Enter FedEx Account No. or Credit Card No. below) Third Party Credit Card Cash/Check

FedEx Account No. 1859-3028-7 Exp. Date _____

Total Packages _____ Total Weight _____ Total Declared Value* \$ _____ Total Charges \$ _____

*When declaring a value higher than \$100 per shipment, you pay an additional charge. See SERVICE CONDITIONS, DECLARED VALUE, AND LIMIT OF LIABILITY section for further information.

8 Release Signature Sign to authorize delivery without obtaining signature

Your signature authorizes Federal Express to deliver this shipment without obtaining a signature and agrees to indemnify and hold harmless Federal Express from any resulting claims.

322



Ft. Myers

RETAIN THIS COPY FOR YOUR RECORDS



Ft. Myers



Ft. Myers

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):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 William Reichel
 FP C L
 P O BOX 430
 Ft. Myers, FL
 33905

4a. Article Number
 Z 333 618 202

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

7. Date of Delivery
 7-23-99

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)
 X *Ann G. Smith*

PS Form 3811, December 1994

102595-98-B-0229

Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 333 618 202

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	<i>William Reichel</i>
Street & Number	<i>FP + L</i>
Post Office, State, & ZIP Code	<i>Ft. Myers, FL</i>
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	<i>(Ft. Myers)</i>
Return Receipt Showing to Whom & Date Delivered	<i>(PP)</i>
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>7-20-99</i>
<i>0710002-005-AC</i>	

PS Form 3800, April 1995

NEWS-PRESS
Published every morning — Daily and Sunday
Fort Myers, Florida

Affidavit of Publication

STATE OF FLORIDA
COUNTY OF LEE

Before the undersigned authority, personally appeared _____
Brenda Leighton

who on oath says that he/she is the _____
Legal Coordinator of the News-Press, a

daily newspaper, published at Fort Myers, in Lee County, Florida; that the
attached copy of advertisement, being a _____
public notice

in the matter of Air Construction Permit

in the _____ Court
was published in said newspaper in the issues of _____
June 8, 1999

Affiant further says that the said News-Press is a paper of general circulation daily in Lee, Charlotte, Collier, Glades and Hendry Counties and published at Fort Myers, in said Lee County, Florida and that said newspaper has heretofore been continuously published in said Lee County, Florida, each day, and has been entered as a second class mail matter at the post office in Fort Myers in said Lee County, Florida, for a period of one year next preceding the first publication of the attached copy of the advertisement; and affiant further says that he/she 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.

Brenda Leighton

Sworn to and subscribed before me this
8th day of _____
June, 1999 by
Brenda Leighton

who is personally known to me or who has produced

as identification, and who did or did not take an oath
Notary Public: *Janet E. Cobb*
Print Name _____

My Commission Expires:

CLASS-16



Janet E. Cobb
MY COMMISSION # CC602535 EXPIRES
November 19, 2000
BONDED THRU TROY FAIR INSURANCE, INC.

**PUBLIC NOTICE OF
INTENT TO ISSUE AIR
CONSTRUCTION
PERMIT**

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
DEP File No.
0710002-005-AC
Florida Power & Light
Company
Units 003-014 Inlet
Fogger Project
Lee County

The Department of
Environmental Protec-
tion (Department)
gives notice of its in-
tent to issue an air
construction permit to
Florida Power & Light
(FPL). The permit is to
install foggers at the
compressor inlet of
twelve 63-megawatt,
No. 2 fuel oil-fired Gen-
eral Electric PG 7821

combustion turbine-
electrical generators at
the Fort Myers Plant in
Lee County. A Best
Available Control Tech-
nology (BACT) deter-
mination was not re-
quired pursuant to
Rule 62-212.400, F.A.C.
The applicant's name
and address are Flori-
da Power & Light Com-
pany, Post Office Box
430, Fort Myers, Flori-
da 33905.

These units normally
achieve their maxi-
mum rated output on
cold days because the
greater compressor in-
let density allows great-
er throughput in the
rotor or expansion sec-
tion of the combustion
turbine. The maximum
power output is lower
on hot days because of
the lower compressor
inlet density. The fog-
gers increase hot-day
power output by ap-
proximately 2-4 MW
through evaporative
cooling of the compres-
sor inlet air. The fog-
gers provide no benefit
on very humid or cold
days and will not be
used under those condi-
tions. Maximum power
production and emis-
sions will continue to
occur at low tempera-
ture conditions with the
foggers turned off. The
result is that maximum
hourly emissions will
not increase although
actual annual emis-
sions will increase be-
cause more fuel will be
used on hot, relatively
dry days.

The number of days
during which the fog-
gers can economically
operate probably limits
emissions increases to
levels below signifi-
cance for the purposes
of PSD applicability.
FP&L, however, pro-
poses enforceable con-
ditions to insure non-
applicability. Each unit
is already allowed to
operate continuously
(8760 per year) but typ-
ically operates less
than 300 hours. The fog-
gers may not be used
more than 500 hours at
each unit, but will typ-
ically operate for fewer
hours than allowed.
The units are not pres-
ently subject to
40CFR60, Subpart GG,
Standards of Perform-
ance for Stationary
Gas Turbines. The De-
partment has prelimi-
narily determined that
the project will not trig-
ger applicability of
Subpart GG, but has
requested that EPA
make the final determi-
nation on the matter.

The maximum in-
crease in annual emis-
sions caused by this
project in tons per year
is summarized below
along with PSD-signif-
icant levels.

**Pollutants - Annual
Emission Increase -
PSD Significant Levels**

RECEIVED

JUN 21 1999

BUREAU OF
AIR REGULATION

AFFIDAVIT OF PUBLICATION

NEWS-PRESS
"Serving Southwest Florida Since 1884"

PM/PM 10 - 2 - 25/15
 SO2 - 24 - 40
 NOX - 34 - 40
 VOC - 1 - 40
 CO - 3 - 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 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. 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 the 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 Statute 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 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 Section 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any 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 determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of the 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 part 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, South District Office, 2295 Victoria Avenue, Suite 364, Ft. Myers, FL 33902-2549, Telephone: 941/332-6969, Fax: 941/332-5963

The complete project file includes the application, technical evaluation, Draft Permit, 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.
 Jun 8

No. 27334

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): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Doug Nealey, Chief Air Branch NE EPA Region IV 61 Forsyth St. Atlanta, GA 30303		4a. Article Number 2333 618 155	
5. Received By: (Print Name) Bruce Fike		4b. Service Type <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	
6. Signature: (Addressee or Agent) X		7. Date of Delivery 6-1-89	
		8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

Z 333 618 155

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

Sent to		D. Nealey	
Street & Number		EPA	
Post Office, State, & ZIP Code		Atlanta GA	
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		5-27-99	
0710002-005-AE Inlet Foggers			

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): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: William Reichel FP & L P O Box 430 Ft. Myers, FL 33905	4a. Article Number 2333 618 156	
	4b. Service Type <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	
	7. Date of Delivery 6-2-99	
5. Received By: (Print Name)	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) X <i>Don J. Moak</i>		

Thank you for using Return Receipt Service.

Z 333 618 156

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

Sent to		<i>William Reichel</i>
Street & Number		<i>FP & L</i>
Post Office, State, & ZIP Code		<i>Ft. Myers FL</i>
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		<i>5-27-99</i>
		<i>0710002-005-AC</i>
		<i>Ft. Myers</i>

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):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Richard Piper
 Repowering Licensing Trng
 FP + L
 PO BOX 14000
 Juno Beach, FL 33408

4a. Article Number
 2333 618 097

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

7. Date of Delivery

5. Received By: (Print Name)
 R. Piper

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

6. Signature: (Addressee or Agent)
 X



Thank you for using Return Receipt Service.

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Z 333 618 097

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

Sent to Richard Piper	
Street & Number FP + L	
Post Office, State, & ZIP Code Juno Beach 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	4-15-99
Ft. Myers Plant	

PS Form 3800, April 1995

Check Sheet

Company Name: FPL - Ft. Myers - Inlet Foggers
Permit Number: 0710002-005-AC
PSD Number: _____
Permit Engineer: Teresa Iderson

Application:

- | | |
|---|--------------------------|
| <input checked="" type="checkbox"/> Initial Application | Cross References: |
| <input checked="" type="checkbox"/> Incompleteness Letters | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Responses | <input type="checkbox"/> |
| <input type="checkbox"/> Waiver of Department Action | <input type="checkbox"/> |
| <input type="checkbox"/> Department Response | |
| <input checked="" type="checkbox"/> Other <u>Emergency of Final Order</u> | |

Intent:

- Intent to Issue
 - Notice of Intent to Issue
 - Technical Evaluation
 - BACT Determination
 - Unsigned Permit
- Correspondence with:
- EPA
 - Park Services
 - Other
- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other