



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

December 6, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Rich Piper, Environmental Specialist  
Florida Power & Light Company  
P. O. Box 088801  
North Palm Beach, FL 33408-8801

Dear Mr. Piper:

Re: Permit Amendment Request - AC 06-179848  
FPL Lauderdale Plant

The intent of Specific Condition No. 23 of the referenced permit was incorrectly stated in the Department's November 14, 1994 letter to you.

Specific Condition No. 23 requires visible emission tests annually on all combustion turbine at this facility. Rule 62-297.340(1)(d), F.A.C., requires annual tests for each source that is major. Thus, the Department requires visible emissions tests on twenty-four gas turbines annually. At least two of the combustion turbines, one in each bank, must be burning fuel oil during the tests.

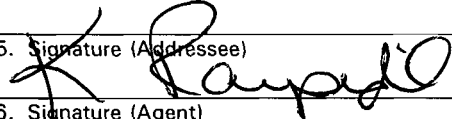
The Department intended the testing requirements to apply only to combustion turbines used more than 400 hours per year. The tests on combustion turbines burning fuel oil is required when it burns fuel oil more than 400 hours per year. The Department will clarify this testing requirement in the amended permit. Following is how we propose to amend the visible emissions test requirements for these combustion turbines.

Specific Condition No. 23 - Visible emissions testing on each bank of combustion turbines shall be determined annually by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988), in accordance with the following:

If natural gas consumption in a bank of combustion turbines reaches 140,000,000 cubic feet (140 MMCF) in a federal fiscal year (FFY), testing will be required on a combustion turbine within that bank while it is operating near its permitted capacity and burning natural gas. For each additional 140 MMCF of natural gas consumed in a bank of combustion turbines in a FFY, an additional combustion turbine in the bank (which has not previously been tested on natural gas during the FFY) must be tested while it is operating near its permitted capacity and burning natural gas.

0110037

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • 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: Mr. Rich Piper, Environ. Spec. Florida Power & Light Company P. O. Box 088801 North Palm Beach, FL 33408-8801		4a. Article Number P 872 562 686	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 12-9-94	
5. Signature (Addressee) 		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent)			

Thank you for using Return Receipt Service.

PS Form 3811, December 1991    ☆U.S. GPO: 1992-323-402    **DOMESTIC RETURN RECEIPT**

P 872 562 686



**Receipt for Certified Mail**  
 No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

PS Form 3800, JUNE 1991

Sent to		Mr. Rich Piper
Street and No.		P. O. Box 088801
P.O., State and ZIP Code		North Palm Beach, FL 33408-8801
Postage		\$
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, and Addressee's Address		
TOTAL Postage & Fees		\$
Postmark or Date		Mailed: 12/07/94 AC 06-179848

Mr. Rich Piper

Letter: Proposed Amendment to Clarify Visible Emissions Requirements  
December 6, 1994

Page Two

If No. 2 fuel oil consumption in a bank of combustion turbines reaches 1,000,000 gallons in a FFY, testing will be required on a combustion turbine within that bank while it is operating near its permitted capacity and burning No. 2 fuel oil. For each additional million gallons of fuel oil consumed in a bank of combustion turbines in a FFY, an additional combustion turbine in the bank (which has not previously been tested on oil during the FFY) must be tested while operation near its permitted capacity and burning No. 2 fuel oil.


No combustion turbine shall be required to be tested on a particular fuel unless that fuel has been burned in the combustion turbine during the FFY.

For fuel consumption testing thresholds achieved in September, the visible emissions testing required thereby may be conducted prior to October 31 of the same Julian calendar year. Such extended testing will not count toward any testing required in the next FFY.

We believe this proposed specific condition is consistent with your October 24, 1994 request. If you have any comments on this condition, please send them to us with emission calculations requested in our November 14, 1994 letter to you.

The Department will resume processing your request after receipt of the emission calculations. If you have any questions or comments on this matter, please write to me or call Willard Hanks at (904) 488-1344.

Sincerely,



John C. Brown, Jr., P.E.  
Administrator  
Air Permitting and Standards

JCB/WH/wh

cc: I. Goldman, SED  
B. Oven, PPS  
D. Banu, BCONRP  
J. Harper, EPA



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

November 14, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Rich Piper, Environmental Specialist  
Florida Power & Light Company  
P. O. Box 088801  
North Palm Beach, FL 33408-8801

Dear Mr. Piper:

Re: Amendment of Permit No. AC 06-179848  
FPL Lauderdale Plant

The Department acknowledges receipt of the \$250 processing fee and your October 24, 1994 letter requesting the referenced permit be amended to change the allowable VOC emissions from some of the fuel storage tanks and to reword the visible emissions testing requirements for the simple-cycle gas turbine units.

The Department can amend Specific Condition No. 1 of this permit to reallocate the allowable VOC emissions from fuel storage tanks Nos. 2, 3, and 5. Please furnish a copy of the calculations used to arrive at the requested VOC emissions for these tanks. The Department cannot modify this permit to allow an increase in the VOC emissions without a new application for permit to construct.

The intent of Specific Condition No. 23 of the referenced permit was to require visible emissions tests for one turbine in each bank annually. As there are two banks of 12 turbines, the visible emissions readings for two turbines would be required annually. If fuel oil was burned more than 400 hours during the year in any one turbine, the visible emissions test was to be done while it was burning fuel oil. If fuel oil was not burned more than 400 hours in any turbine in either bank, the test would be done while a turbine was burning natural gas. Thus, the Department expects two visible emissions tests annually, one from a turbine in each bank. The Department will clarify this testing requirement in the amended permit.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

*Printed on recycled paper.*

Mr. Rich Piper  
 November 14, 1994  
 Page 2 of 2

The Department will resume processing your request after receipt of the emission calculations. If you have any questions or comments on this matter, please write to me or call Willard Hanks at (904) 488-1344.

Sincerely,

*John C. Brown, Jr.*  
 John C. Brown, Jr., P.E.  
 Administrator  
 Air Permitting and Standards

JCB/WH/bjb

cc: I. Goldman, SED  
 B. Oven, PPS  
 D. Banu, BCONRP

P 872 563 692



**Receipt for Certified Mail**

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

Sent to Mr. Rich Piper, FPL	Postage	\$
Street and No. P. O. Box 088801	Certified Fee	
P.O., State and ZIP Code North Palm Beach, FL 33408-8801	Special Delivery Fee	
	Restricted Delivery Fee	
	Return Receipt Showing to Whom & Date Delivered	
	Return Receipt Showing to Whom, Date, and Addressee's Address	
	TOTAL Postage & Fees	\$
	Postmark or Date	Mailed: 11-14-94 Permit: AC 06-179848

PS Form 3800, JUNE 1991

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**  
 • Complete items 1 and/or 2 for additional services.  
 • Complete items 3, and 4a & b.  
 • 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:  
 Mr. Rich Piper  
 Environmental Specialist  
 Florida Power & Light Company  
 P. O. Box 088801  
 North Palm Beach, FL 33408-8801

4a. Article Number  
 P 872 563 692  
 4b. Service Type  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

5. Signature (Addressee)  
 6. Signature (Agent)

7. Date of Delivery  
 11-19-94  
 8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Florida Power & Light Company, P.O. Box 088801, North Palm Beach, FL 33408-8801



October 24, 1994

0110037

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

Re: **FPL Lauderdale Plant**  
**Air Construction Permit #AC-06-179848**

Dear Clair:

This correspondence is submitted to request several changes in the FDEP Air Construction permit (#AC-06-179848) for the FPL Lauderdale plant. Please discard my earlier request to your office dated August 31, 1994, and replace it with this one. Note that a concurrent request to change the associated air Operation permit (#AO-06-230614) is also being submitted to the Southeast District Office in West Palm Beach. Attached is a check in the amount of \$250 to cover the Department's administrative expenses, per your correspondence of October 5, 1994.

The requested changes involve two items: (1) Change the VOC emission limits for the on-site fuel oil storage tanks, and (2) Change the permit language regarding visible emission evaluations for the simple-cycle gas turbine units.

**Item 1 - VOC Emission Limits**

**Background**

A change is requested to change the VOC emission limits for the on-site fuel oil storage tanks. The original construction permit issued for the facility had an emissions cap of 99.92 tons per year which included emission allocations for Tanks #2, #3, and #5, the gas-turbine dump tanks, the gasoline storage tank, the diesel storage tank, the simple-cycle gas turbines, as well as the now-demolished boiler units 4 and 5. The total allocation for the tanks was 9.92 tons per year (i.e., Tank #2 = 0.05 tons per year, Tank #3 = 6.38 tons per year, Tank #5 = 3.38 tons per year, gas turbine dump tanks = 0.003 tons per year, gasoline storage tank = 0.106 tons per year, and the diesel storage tank = 0.001 tons per year).

Various permit-related changes and operational changes at the Lauderdale facility have resulted in the current situation in which the current VOC limits on the fuel oil storage tanks are no longer appropriate. Following is a brief synopsis of these changes:

At the time the construction permit was issued, Tank #2 still contained #6 residual oil. The fuel useage for tanks 3 and 5 reflected a 40% capacity factor for oil firing in the new combustion turbines, and 100% capacity factor for oil firing in the simple-cycle gas turbines. Subsequent to the construction permit being issued, the capacity factor

RECEIVED  
OCT 28 2 00 PM '94  
AIR - ROOM

for oil firing for the combustion turbines was reduced to 25% (via PSD-FL-146) and the RACT limit on the simple-cycle gas turbines effectively limited the oil-firing capacity factor to 10 percent. In addition, when the initial operating permit was issued, the VOC emission allocation for Tank #2 did not reflect the use of distillate oil; thus the allocation of 0.05 tons per year for this tank is too low.

#### Effect of Title V Permit

FPL must submit a Title V permit application to the Department for the Lauderdale facility by April 2, 1995. Under the current Title V rules, FPL must fill out a separate emissions unit section of the application for each of the fuel oil storage tanks, because they each have separate emission limits in the current air operating permit. This information could be more easily considered under a single emissions unit section, or in the insignificant sources section, as appropriate.

#### Requested Change

In view of the history cited above, and the pending submittal of the Title V permit application for the Lauderdale facility in April 1995, FPL requests that the Department change the current VOC emission limits for the tanks as follows:

Tank #2	2.37 tons per year
Tank #3	5.11 tons per year
<u>Tank #5</u>	<u>2.33 tons per year</u>
Total	9.81 tons per year

This proposal would not change the overall emissions from the facility. I have attached a copy of the relevant page from the current air operating permit with the suggested change added.

### Item 2 - Visible Emission Evaluations for Simple-cycle gas turbines

#### Background

The current air operation permit contains language regarding visible emissions evaluations which can be interpreted to mean that each gas turbine must be evaluated for visible emissions once-per-year on natural gas fuel, as well as one unit per bank-of-twelve required to be evaluated on distillate oil fuel. Specific Condition 9 of that permit currently reads as follows:

"Visible emissions from all units shall be determined annually by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988). At least one test shall be conducted on a turbine in each bank while it is operating near its permitted capacity and burning No. 2 fuel oil."

Requested Change

FPL requests that the Department revise Specific Condition 9 to read as follows:

"Visible emissions from the gas turbine units shall be determined by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988) if fuel oil consumption in any unit reaches 23,810 bbls (1,000,000 gallons) in a fiscal year, within that fiscal year. Usage may be determined on the basis of proportionate time of operation versus total fuel consumption for each block of twelve units. If fuel consumption testing threshold is achieved in September, then visible emissions testing may be conducted prior to October 31 of the same calendar year."

The Department should consider the following in reviewing this proposed change:

■ The Department inserted language similar to that which FPL is suggesting for the Lauderdale permit, into the Port Everglades permit, which is in the same district, and which was issued within 2 days of the Lauderdale permit.

■ FAC 17-297.340(1)(g) states that "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 operating permit."

■ These units are virtually identical. Therefore, emissions data from any one gas turbine will be representative of all units in a given bank.

■ These units are "peaking units" which are typically operated only during periods of high electric load demand. They therefore have extremely low annual capacity factors. In 1993 for example, the total annual operating hours on liquid and gas combined for all 24 units was only 4,687 hours (2.2% capacity factor). In addition, the FDEP NOx RACT permits for these units (AO 06-148760 and AO 06-148761) in effect limit the annual capacity of each bank of turbines to 10%. Thus, the "potential to emit" from these units is minor compared to the base-loaded generating units.

Please do not hesitate to contact me at (407) 625-7661 regarding the above requests.

Sincerely,

Rich Piper  
Environmental Specialist  
Florida Power & Light Company

cc: Broward County Department of Natural Resource Protection  
FDEP Southeast District Office



BEST AVAILABLE COPY

PECIFIC CONDITIONS:

Tanks

1. The maximum volatile organic compounds (VOC) emissions and volume of organic liquids handled by the tanks shall not exceed the following:

Vessel	Organic Liquid	Emissions (TPY VOC)
No. 2 Storage Tank	No. 2 fuel oil	2.37
No. 3 Storage Tank	light distillate	5.11
No. 5 Storage Tank	No. 2 fuel oil	2.33
Gas Turbine Dump Tanks	No. 2 fuel oil	0.003
Gasoline Storage Tank	gasoline	0.106
Diesel Fuel Storage Tank	diesel fuel	0.001

2. The permittee shall keep records of the following for at least three years:
- a) The amount of light distillate fuel oil obtained for the plant.
  - b) The amount of No. 2 fuel oil obtained for the plant.
  - c) The throughput for fuel storage tank No. 3, fuel storage tank No. 5, gas turbine dump tanks, gasoline storage tank, and diesel fuel storage tank.

3. The VOC emission in TPY from all stationary tanks at this facility shall be calculated annually by the procedures described in AP-42, Emission Factors, Section 4.3, Storage of Organic Liquids. Actual throughput and meteorological data shall be used for these calculations.

Gas Turbines

4. VOC emissions from each gas turbine shall not exceed 0.0013 lbs/MMBTU when the turbine is burning No. 2 fuel oil and 0.0034 lbs/MMBTU when the turbine is burning natural gas. When both fuels (oil and gas) are burned together, the allowable VOC emissions shall be prorated.
5. Total VOC emissions from the 24 gas turbines when operating at the permitted capacity shall not exceed 57.28 lbs/hr. when the units are burning natural gas and 21.06 lbs/hr. when the units are burning oil. When both fuels are burned in the turbines at the same time, the allowable emissions shall be prorated.
6. Visible emissions shall not exceed 20% opacity.
7. The permittee shall keep records of the type and quantity of fuel, GHP of oil and MMBCF/hr. of natural gas, used by each bank of turbines (GTs 1-12 and GT 13-24) for at least three (3) years. Usage may be determined on the basis of time of operation versus total fuel consumption for block of 12 units.
8. The VOC emission factors for the gas turbines shall be confirmed every five (5) years by EPA Method 25A tests as described in 40 CFR 60, Appendix A (July 1, 1988) on any of the gas turbines while burning 100% natural gas and while burning 100% No. 2 fuel oil.
9. Visible emissions from all units shall be determined annually by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988). At least one test shall be conducted on a turbine in each bank while it is operating near its permitted capacity and burning No. 2 fuel oil.



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

October 5, 1994

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Rich Piper  
Florida Power & Light Company  
P. O. Box 088801  
North Palm Beach, Florida 33408-8801

RE: FPL Lauderdale Plant, AC06-179848  
Request for Permit Amendment

Dear Mr. Piper:

The Bureau of Air Regulation has reviewed the above referenced request and determined that it will require a permit amendment and a \$250 processing fee. As soon as the fee is received, we will be begin processing your request. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

*Patricia G. Adams*

C. H. Fancy, P.E.  
Chief

Bureau of Air Regulation

CHF/pa

cc: Willard Hanks

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- 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:  
 Mr. Rich Piper  
 Florida Power & Light Company  
 P. O. Box 088801  
 North Palm Beach, Florida  
 33408-8801

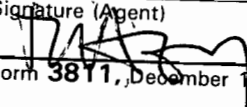
4a. Article Number  
 Z 751 859 985

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

7. Date of Delivery  
 OCT 11 1994

5. Signature (Addressee)

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

6. Signature (Agent)  


**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 751 859 985



**Receipt for Certified Mail**

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

Sent to Mr. Rich Piper	
Street and No. P. O. Box 088801	
P.O., State and ZIP Code North Palm Beach, FL 33408	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 10/6/94 ACO6-179848	

PS Form 3800, March 1993



August 31, 1994

0110037  
A006-230614  
8-31-94

Ms. Stephanie Brooks  
State of Florida  
Department of Environmental Protection  
P.O. Box 15425  
West Palm Beach, Florida 33416

**Re: FPL Lauderdale Plant**  
**Air Operation Permit #A006-230614**

Dear Stephanie:

This correspondence is submitted to request several changes in the FDEP Air Operation permit (#AO-06-230614) for the FPL Lauderdale plant. Please note that a concurrent request to change the associated air construction permit (#AC-06-179848) is also being submitted to the Department of Air Resources Management (DARM) in Tallahassee.

The requested changes involve three items: (1) Combine the VOC emission limits for the on-site fuel oil storage tanks, (2) Change the permit language regarding visible emission evaluations for the simple-cycle gas turbine units, (3) combine the Air Operation permit (permit number AO-06-230614) and the NOx RACT permits (permit numbers AO-06-148760 and AO-06-148761).

**Item 1 - VOC Emission Limits**

**Background**

A change is requested to combine the VOC emission limits for the on-site fuel oil storage tanks. The original construction permit issued for the facility had an emissions cap of 99.92 tons per year which included emission allocations for Tanks #2, #3, and #5, the gas-turbine dump tanks, the gasoline storage tank, the diesel storage tank, the simple-cycle gas turbines, as well as the now-demolished boiler units 4 and 5. The total allocation for the tanks was 9.92 tons per year (i.e., Tank #2 = 0.05 tons per year, Tank #3 = 6.38 tons per year, Tank #5 = 3.38 tons per year, gas turbine dump tanks = 0.003 tons per year, gasoline storage tank = 0.106 tons per year, and the diesel storage tank = 0.001 tons per year).

Various permit-related changes and operational changes at the Lauderdale facility have resulted in the current situation in which the individual VOC limits on the fuel oil storage tanks are no longer appropriate. Following is a brief synopsis of these changes:

At the time the construction permit was issued, Tank #2 still contained #6 residual oil. The fuel usage for tanks 3 and 5 reflected a 40% capacity factor for oil firing in the new combustion turbines, and 100% capacity factor for oil firing in the simple-cycle gas turbines.

Subsequent to the construction permit being issued, the capacity factor for oil firing for the combustion turbines was reduced to 25% (via PSD-FL-146) and the RACT limit on the simple-cycle gas turbines effectively limited the oil-firing capacity factor to 10 percent. In addition, when the initial operating permit was issued, the VOC emission allocation for Tank #2 did not reflect the use of distillate oil; thus the allocation of 0.05 tons per year for this tank is too low.

It should be noted that the facility reported VOC emissions for Tank #2 of 1.48 tons per year in the 1993 Annual Operating Report (AOR); however the total VOC emissions for all three of the large storage tanks was only 6.51 tons; well within the combined permitted limitation.

#### Effect of Title V Permit

FPL must submit a Title V permit application to the Department for the Lauderdale facility by April 2, 1995. Under the current Title V rules, FPL must fill out a separate emissions unit section of the application for each of the fuel oil storage tanks, because they each have separate emission limits in the current air operating permit. This information could be more easily considered under a single emissions unit section, or in the insignificant sources section, as appropriate.

#### Requested Change

In view of the history cited above, and the pending submittal of the Title V permit application for the Lauderdale facility in April 1995, FPL requests that the Department combine the current VOC emission limits for the tanks into one emission limit of 9.92 tons per year, which is the current aggregate in the operations permit. FPL would continue to track the emissions of each of the tanks, but would "roll-up" the VOC emissions into a combined limit not to exceed the 9.92 tpy. This proposal would not change the overall emissions from the facility. The change would reflect the current ability of the facility to transfer fuel between tanks as needed. I have attached a copy of the relevant page from the current air operating permit with the suggested change added.

#### Item 2 - Visible Emission Evaluations for Simple-cycle gas turbines

##### Background

The current air operation permit contains language regarding visible emissions evaluations which can be interpreted to mean that each gas turbine must be evaluated for visible emissions once-per-year on natural gas fuel, as well as one unit per bank-of-twelve required to be evaluated on distillate oil fuel. Specific Condition 9 of that permit currently reads as follows:

"Visible emissions from all units shall be determined annually by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988). At least one test shall be conducted on a turbine in each bank while it is operating near its permitted capacity and burning No. 2 fuel oil."

### Requested Change

FPL requests that the Department revise Specific Condition 9 to read as follows:

"Visible emissions from the gas turbine units shall be determined by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988) if fuel oil consumption in any unit reaches 23,810 bbls (1,000,000 gallons) in a fiscal year, within that fiscal year. Usage may be determined on the basis of proportionate time of operation versus total fuel consumption for each block of twelve units. If fuel consumption testing threshold is achieved in September, then visible emissions testing may be conducted prior to October 31 of the same calendar year."

The Department should consider the following in reviewing this proposed change:

■ The Department inserted language similar to that which FPL is suggesting for the Lauderdale permit, into the Port Everglades permit, which is in the same district, and which was issued within 2 days of the Lauderdale permit.

■ FAC 17-297.340(1)(g) states that "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 operating permit."

■ These units are virtually identical. Therefore, emissions data from any one gas turbine will be representative of all units in a given bank.

■ These units are "peaking units" which are typically operated only during periods of high electric load demand. They therefore have extremely low annual capacity factors. In 1993 for example, the total annual operating hours on liquid and gas combined for all 24 units was only 4,687 hours (2.2% capacity factor). In addition, the FDEP NOx RACT permits for these units (AO 06-148760 and AO 06-148761) in effect limit the annual capacity of each bank of turbines to 10%. Thus, the "potential to emit" from these units is minor compared to the base-loaded generating units.

### Item 3 - Combining Permits

The Lauderdale facility currently has several permits which address air emissions:

- Site Certification (#PA89-6636)
- PSD Permit (#PSD-FL-145)
- Air Operating Permit (#AO-06-230614)
- NOx RACT (#AO-06-148760 and AO-06-148761)

The language in each of the NOx RACT permits states that they revise the Air Operation permit; however, different permit numbers were issued for the NOx RACT permits. FPL interprets the NOx RACT permits to be revisions to the Air Operation permit #AO-06-230614, and therefore, for simplicity, FPL requests the Department to issue a revised Air Operation permit (#AO-06-230614) which incorporates the NOx RACT permits into it.

Please do not hesitate to contact me at (407) 625-7661 regarding the above requests.

Sincerely,

A handwritten signature in cursive script that reads "Rich Piper".

Rich Piper  
Environmental Specialist  
Florida Power & Light Company

cc: Broward County Department of Natural Resource Protection  
Clair Fancy - FDEP Tallahassee

**BEST AVAILABLE COPY**

**Tanks**

1. The maximum volatile organic compounds (VOC) emissions for the fuel oil storage tanks shall not exceed the following:

Vessel	Organic Liquid	Emissions (TPY VOC)
No. 2 Storage Tank	No. 2 fuel oil	Combined emissions for all tanks not to exceed 9.92 TPY
No. 3 Storage Tank	light distillate	
No. 5 Storage Tank	No. 2 fuel oil	
Gas Turbine Dump Tanks	No. 2 fuel oil	
Gasoline Storage Tank	gasoline	
Diesel Fuel Storage Tank	diesel fuel	

2. The permittee shall keep records of the following for at least three years:

- a) The amount of light distillate fuel oil obtained for the plant.
- b) The amount of No. 2 fuel oil obtained for the plant.
- c) The throughput for fuel storage tank No. 3, fuel storage tank No. 5, gas turbine dump tanks, gasoline storage tank, and diesel fuel storage tank.

3. The VOC emission in TPY from all stationary tanks at this facility shall be calculated annually by the procedures described in AP-42, Emission Factors, Section 4.3, Storage of Organic Liquids. Actual throughput and meteorological data shall be used for these calculations.

**Gas Turbines**

4. VOC emissions from each gas turbine shall not exceed 0.0013 lbs/MMBTU when the turbine is burning No. 2 fuel oil and 0.0034 lbs/MMBTU when the turbine is burning natural gas. When both fuels (oil and gas) are burned together, the allowable VOC emissions shall be prorated.

5. Total VOC emissions from the 24 gas turbines when operating at the permitted capacity shall not exceed 57.28 lab/hr. when the units are burning natural gas and 21.06 lbs/hr. when the units are burning oil. When both fuels are burned in the turbines at the same time, the allowable emissions shall be prorated.

6. Visible emissions shall not exceed 20% opacity.

7. The permittee shall keep records of the type and quantity of fuel, GHP of oil and MMBCF/hr. of natural gas, used by each bank of turbines (GTs 1-12 and GT 13-24) for at least three (3) years. Usage may be determined on the basis of time of operation versus total fuel consumption for block of 12 units.

8. The VOC emission factors for the gas turbines shall be confirmed every five (5) years by EPA Method 25A tests as described in 40 CFR 60, Appendix A (July 1, 1988) on any of the gas turbines while burning 100% natural gas and while burning 100% No. 2 fuel oil.

9. Visible emissions from all units shall be determined annually by EPA Method 9 as described in 40 CFR 60, Appendix A (July 1, 1988). At least one test shall be conducted on a turbine in each bank while it is operating near its permitted capacity and burning No. 2 fuel oil.