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

January 25, 1995

Mr. John Brown
Administrator, Air Permitting & Standards
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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

Dear Mr. Brown:

Attached per your request of December 6, 1994 please find the following information:

· Application for permit modification - using the new FDEP form 62-210.900(1). Since FPL will be submitting a Title V application for this facility within a few months, I have not addressed all of the emission units located at the Lauderdale facility, but rather restricted the information to only the three above-ground fuel oil storage tanks.

· FPL's calculations for Volatile Organic Carbon (VOC) emissions from the fuel oil storage tanks at the Lauderdale generating station (included as Attachment A in the permit application). FPL has employed EPA's TANKS2 computer program to generate the VOC emission data from the fuel oil storage tanks.

In your correspondence of December 6, 1994, the issue of visible emission testing for the simple-cycle gas turbines was addressed. Specifically, you proposed that 140 million cubic feet of natural gas fuel be used as the threshold for triggering visible emission testing at the gas turbines. I have calculated that quantity of natural gas to be approximately equivalent to 17 hours of operation for one of the gas turbine banks. In a subsequent conversation with Mr. Willard Hanks of your office, I learned that the intent of the Department was to relate the quantity of natural gas fuel which would trigger visible emission testing, to 400 hours of operation for a bank of 12 gas turbines. My calculations, using 702 mmBtu/hour heat input/gas turbine and 1040 btu/cubic foot of natural gas, show that 3,240 million cubic feet of natural gas is approximately equivalent to 400 hours of operation; therefore FPL requests that the language in Specific Condition 23 be amended as follows:

> If natural gas consumption in a bank of combustion turbines reaches 3,240,000,000 (3,240 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 3,240 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.

The remainder of the Department's proposed language in the December 6th correspondence is acceptable to FPL.

Should you, or anyone in the Department have any questions regarding the enclosed information, please do not hesitate to contact me at (407) 625-7661. Thank-you in advance for your attention to this matter.

Very Truly Yours,

Richard Piper
Environmental Specialist
Florida Power & Light Company

cc:
I. Goldman FDEP/SED
D. Banu BCDNRP

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

FPL

August 31, 1994

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 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.

The requested changes involve two items: (1) Combine 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 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 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 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 relevent 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.

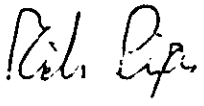
- FAC 17-297.340(1)(g) states that "any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period coinciding with the term of its air operating permit."

- 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

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
No. 3 Storage Tank	light distillate	for all tanks not to
No. 5 Storage Tank	No. 2 fuel oil	exceed 9.92 TPY
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 MMCF/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.

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

FPL

RECEIVED
AUG 11 1993
Division of Air
Resources Management

August 5, 1993

Mr Tom Tittle
Department of Environmental Regulation-SED
1900 S. Congress Avenue, Suite A
West Palm Beach, FL 33406

RE: Lauderdale Plant
Steam Injection Curve CT 5B
PSD-FL-145, PA89-26

Dear Mr. Tittle:

Enclosed is a copy of the curves for CT 5B as required by special condition 20 of PSD-FL-145. The Curves entitled "Ambient Temperature vs Heat Input" illustrates the effect of the ambient temperature on the heat input at the permitted NO_x (42 ppm gas and 65 ppm oil) limit. The other Curves entitled "Steam Injection Control Curve" illustrate the steam injection rate necessary to maintain the permitted NO_x limit across the load range.

If you have any questions or comments, please call me at (407) 625-7661.

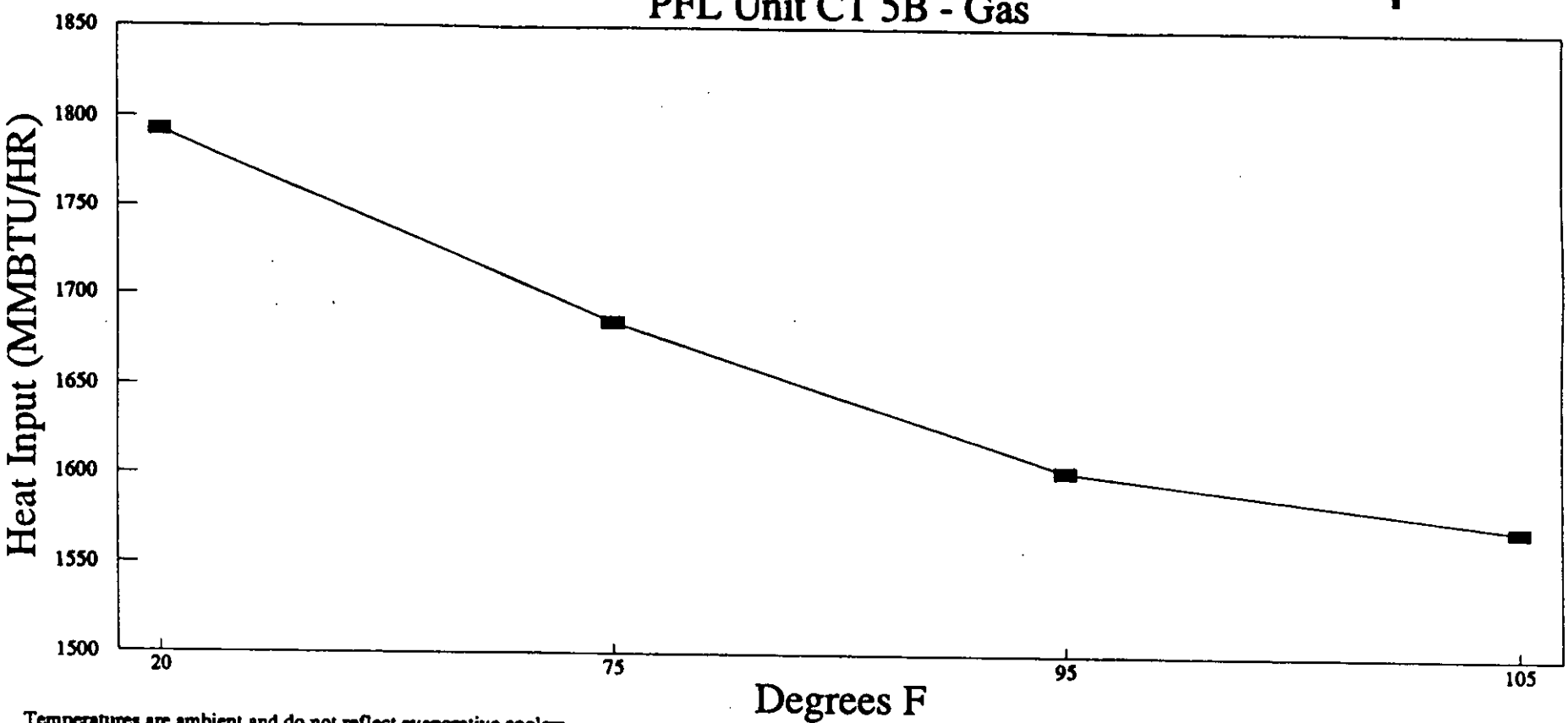
Sincerely,

Daniel M. MacDougall
Environmental Specialist
Florida Power & Light

John Brown
Preston Platt
File w/ permit folder

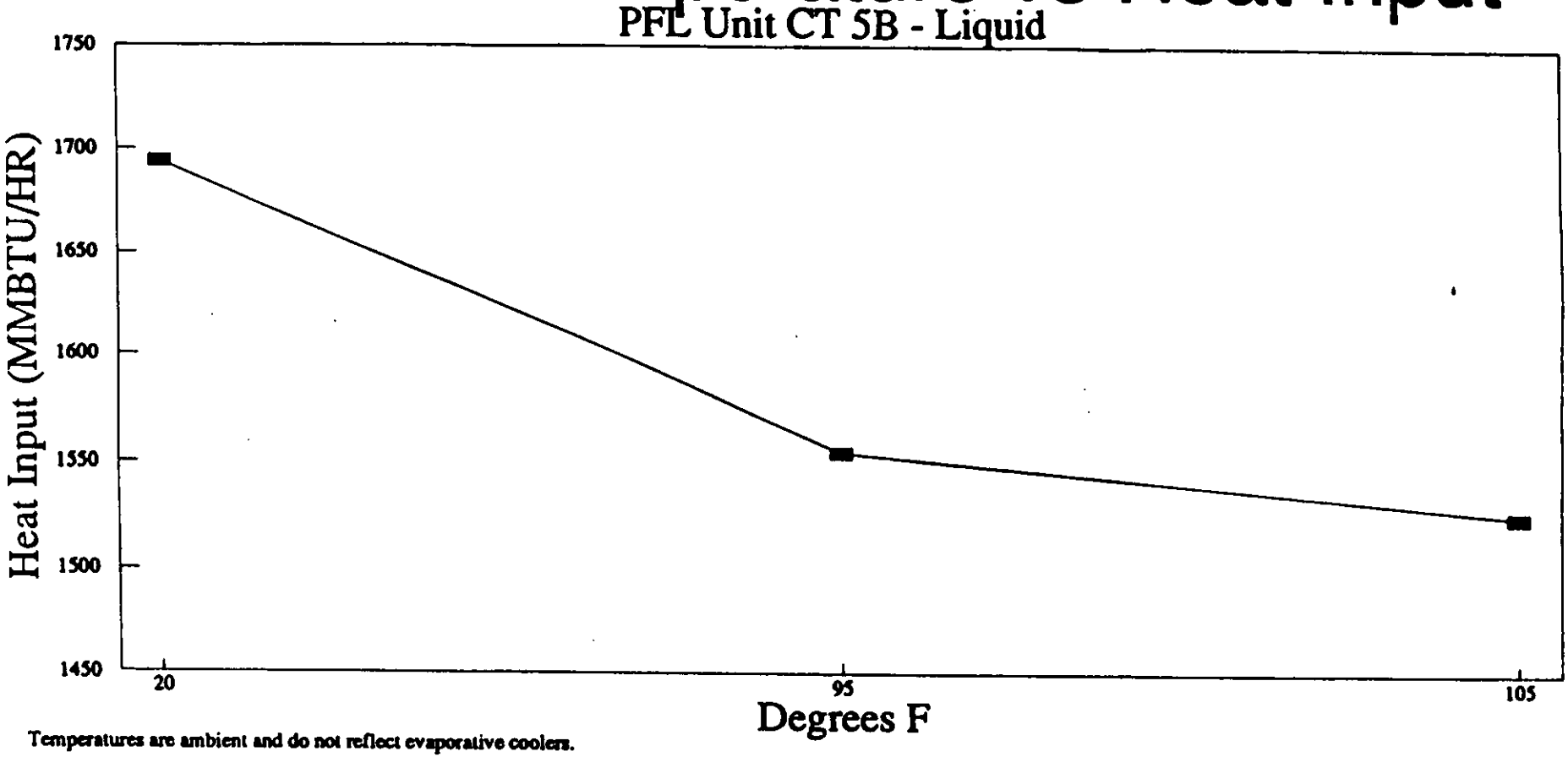
cc: Clair Fancy DER/TAL

Ambient Temperature vs Heat Input



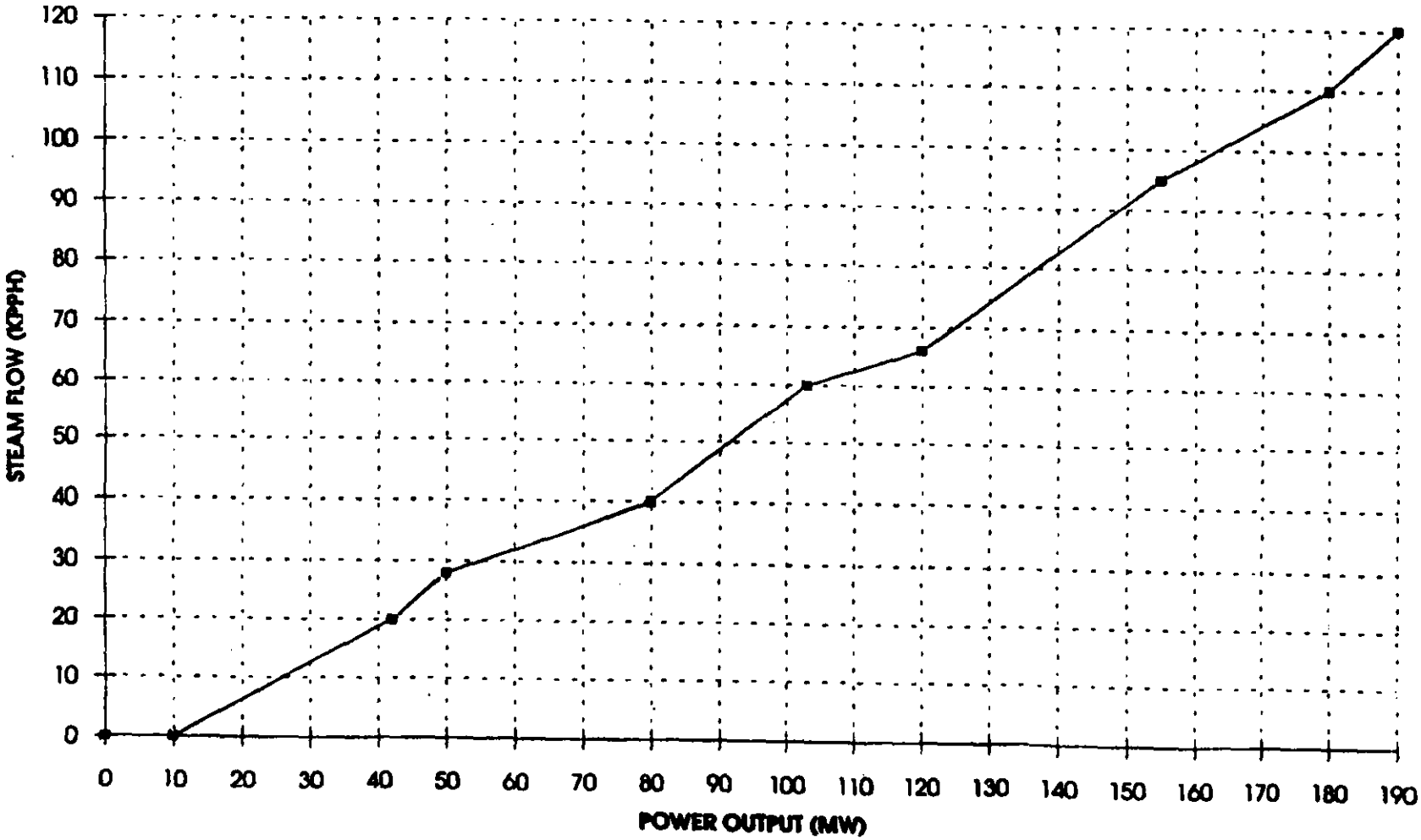
Temperatures are ambient and do not reflect evaporative coolers.

Ambient Temperature vs Heat Input



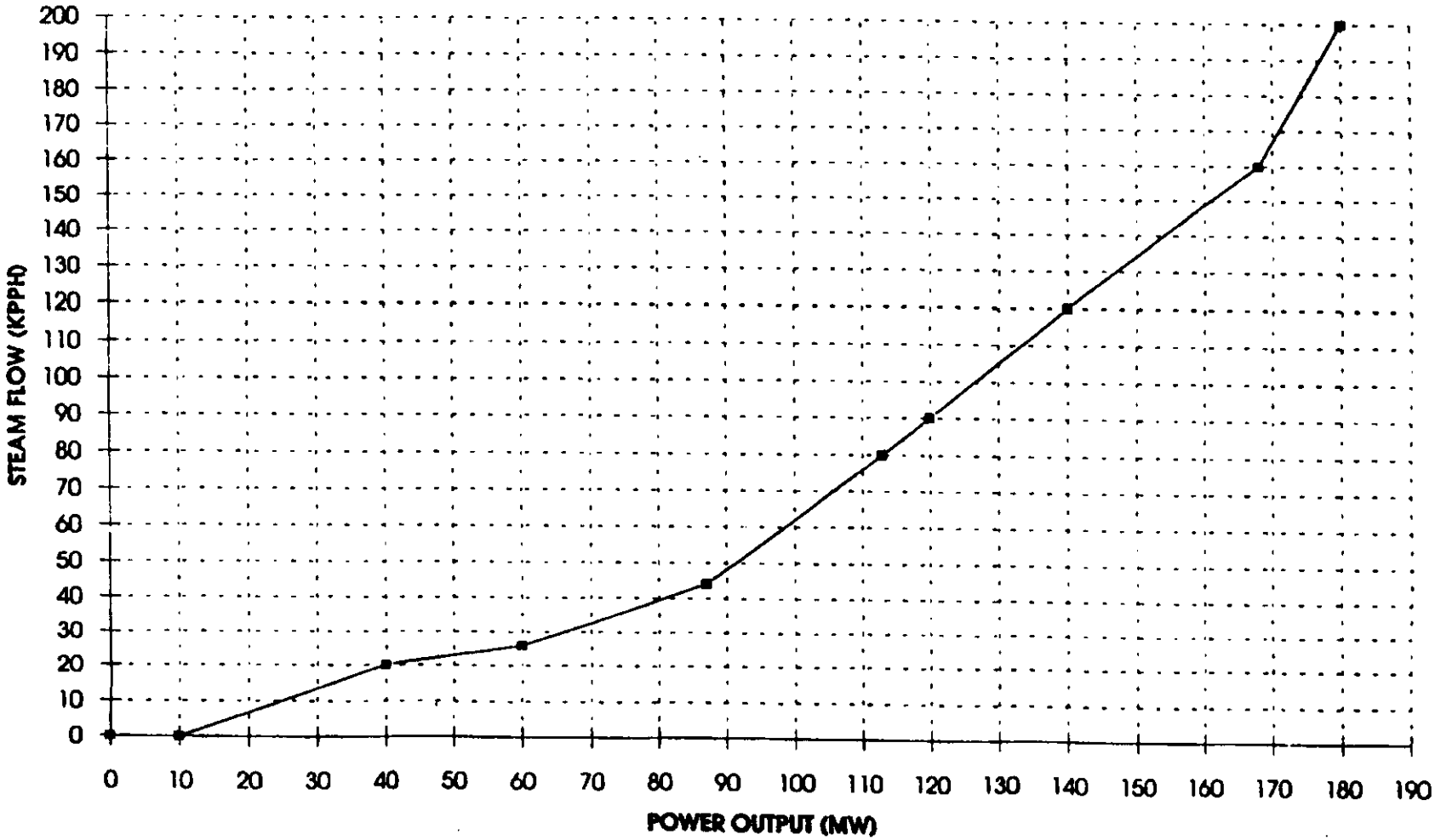
Temperatures are ambient and do not reflect evaporative coolers.

STEAM INJECTION CONTROL CURVE--CT 5B GAS



5/14/93

STEAM INJECTION CONTROL CURVE--CT 5B OIL



5/14/93

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET, N.E
ATLANTA, GEORGIA 30365

4APT-AEB

JUL 19 1993

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Charles D. Henderson
Environmental Licensing Project Manager
Environmental Affairs Department
Florida Power & Light Company
P. O. Box 088801
North Palm Beach, Florida 33408-8801

RE: Lauderdale Repowering Project (PSD-FL-145)

Dear Mr. Henderson:

The review of Mr. Daniel MacDougall's March 12, May 18, and May 26, 1993, letters requesting administrative changes to the conditions of the Prevention of Significant Deterioration permit (PSD-FL-145) issued to Florida Power & Light Company (FPL) on March 14, 1991, for the Lauderdale Repowering project has been completed. You requested that Specific Conditions 1 and 5 of the permit be revised to account for a higher sulfur content in the natural gas and to authorize the burning of all natural gas fuel permitted for this facility in the combustion turbines. The basis of your request is that the natural gas contains more sulfur than was originally estimated, that there is a delay in installing the duct burners, and that the combustion turbines can burn the natural gas permitted for the duct burners without any increase in emissions.

Based on the foregoing, it is determined that the proposed revision to the Specific Conditions 1 and 5 of PSD-FL-145 is acceptable and will not result in the increase in permitted annual emissions of any pollutant subject to the PSD regulations. As an administrative change, this revision will not require additional public participation procedures.

Authority to construct a stationary source was granted for the Florida Power & Light Company, Lauderdale Repowering Project, subject to the conditions contained in the permit to construct on March 14, 1991. This administrative change to PSD-FL-145 does not alter the commence construction deadline for the Lauderdale Repowering Project. This authority to construct is based solely on the requirements of 40 CFR §52.21, the federal regulations governing significant deterioration of air quality, and in no way affects the approvals under other federal or State regulatory authorities. Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, may subject Florida Power & Light Company to an enforcement action.

Any questions concerning this administrative permit revision may be directed to Mr. Winston A. Smith, Director; Air, Pesticides, and Toxics Management Division at (404) 347-3043.

Sincerely,

Patrick M Tobin

Patrick M. Tobin
Acting Regional Administrator

Enclosure

cc: C. H. Fancy, FDER
M. Harley
D. Smallridge, OGC
B. Oven
D. Dittle, SE Dist.
A. Zinero, Broward Co.
R. Cunningham, HBG-2S
CHF/PL

7/26

CHF
PL → FYI

PA

PSD-FL-145

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. §7470 et seq., and the regulations promulgated thereunder at 40 C.F.R. §52.21, as amended at 45 Fed. Reg. 52676, 52735-41 (August 7, 1980),

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

is hereby authorized to construct/modify a stationary source, specifically the Lauderdale Repowering Project, at the following location:

Florida Power & Light Company
Lauderdale Electric Utility Plant
Griffin Road
Dania, Florida

UTM Coordinates: Zone 17 580.1 km E, 2883.3 km N

Upon completion of this authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached Specific Conditions (Part I) and General Conditions (Part II).

The revisions to this permit shall become effective on the date signed below.

If construction does not commence within 18 months after March 14, 1991, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and Local law.

Patrick M Tobin

Patrick M. Tobin
Acting Regional Administrator

JUL 19 1993

Date Signed

The Specific Conditions of federal permit PSD-FL-145 shall be modified as follows:

FROM:

Specific Condition No. 1

The maximum heat input to each combustion turbine (CT) shall neither exceed 1,685.0 mmBTU/hr while firing natural gas, nor 1,646.9 mmBTU/hr while firing fuel oil (@ 75°F). Each CT's fuel consumption shall be continuously measured and recorded. The maximum heat input to each duct burner shall not exceed 90.62 mmBTU/hr. Each duct burner's fuel consumption shall be continuously measured and recorded.

Specific Condition No. 5

The maximum allowable emissions from each CT in accordance with the BACT determination shall not exceed the following emission limitations at 75°F:

Pollutant	Basis	Fuel	Emission Limitations lbs/hr/CT	lbs/hr/DB	4 CT* (TPY)	4 DB+ (TPY)
NO_x	42 ppmvd	Gas	264	10.0		152
	65 ppmvd	Oil	422		4,716	
VOC	1 ppmvd	Gas	1.3	2.0		30.5
	6 ppmvd	Oil	7.8		48.3	
CO	30 ppmvd	Gas	89	17.6	1,405	268
	33 ppmvd	Oil	100			
PM/PM_{10}		Gas	14.7	0.7		10.7
		Oil	58.0		414	
SO_2		Gas	0.97	0.05		0.8
		Oil	538		1,582	

CT - Combustion Turbine
DB - Duct Burner

NOTES: * Refers to the maximum facility emissions (four CTs).
With capacity factor limitations of 25 percent on oil and 87 percent for the facility.
+ Refers to maximum duct burner emissions at 87 percent capacity factor.

NO_x emissions from duct burners are based on an as-fired emission limitation of 0.11 lbs/mmBTU.

Sulfur dioxide emission assume a maximum of 0.3 percent sulfur in fuel oil for hourly emissions and an average sulfur content of 0.2 percent for annual emissions.

TO:

Specific Condition No. 1

When the duct burners are installed, the maximum heat input to each combustion turbine (CT) shall neither exceed 1,685.0 mmBTU/hr while firing natural gas, nor 1,646.9 mmBTU/hr while firing fuel oil (@ 75°F). Each CT's fuel consumption shall be continuously measured and recorded. The maximum heat input to each duct burner shall not exceed 90.62 mmBTU/hr. Each duct burner's fuel consumption shall be continuously measured and recorded.

Until the duct burners are installed, the maximum heat input to each CT shall not exceed 1,775.62 mmBTU/hr while firing natural gas nor 1,646.9 mmBTU/hr while firing fuel oil (@ 75°F). Each CTs fuel consumption shall be continuously measured and recorded.

Specific Condition No. 5

The maximum allowable sulfur (total) content of the natural gas burned at this facility shall not exceed 10 grains per 1,000 cubic feet (gr/1000 CF). The permittee shall monitor the sulfur content of the natural gas by the customized fuel monitoring schedule approved by EPA. The sulfur content of the fuel oil shall not exceed a maximum of 0.3 percent and shall not exceed an average of 0.2 percent during any 12-month period.

The maximum allowable emissions from each CT in accordance with the BACT determination shall not exceed the following emission limitations at 75°F:

MAXIMUM ALLOWABLE EMISSION PRIOR TO THE INSTALLATION OF THE DUCT BURNERS

Pollutant	Basis	Fuel	Emission Limitations** lbs/hr/CT	4 CT* (TPY)
NO_x***	42 ppmvd	Gas	264	4,868
	65 ppmvd	Oil	422	
VOC	1 ppmvd	Gas	1.3	50
	6 ppmvd	Oil	7.8	
CO	30 ppmvd	Gas	89	1,489
	33 ppmvd	Oil	100	
PM/PM_{10}		Gas	14.7	
		Oil	58.0	424.7
SO_2		Gas	4.9	
		Oil	538	1,582.8

CT - Combustion Turbine
DB - Duct Burner

NOTES * Refers to the maximum facility emissions (four CTs). With capacity factor limitations of 25 percent on oil.

** Table revised to reflect removal of the duct burners and reallocation of the annual emissions to the CTs.

*** ppm NO_x, dry, corrected to ISO standard ambient air conditions and 15 percent oxygen.

MAXIMUM ALLOWABLE EMISSION LIMITS WITH THE DUCT BURNERS INSTALLED

Pollutant	Basis	Fuel	Emission Limitations*			
			lbs/hr/CT	lbs/hr/DB	4 CT* (TPY)	4 DB* (TPY)
NO_x**	42 ppmvd	Gas	264	10.0		152
	65 ppmvd	Oil	422		4,716	
VOC	1 ppmvd	Gas	1.3	2.0		30.5
	6 ppmvd	Oil	7.8		48.3	
CO	30 ppmvd	Gas	89	17.6	1,405	268
	33 ppmvd	Oil	100			
PM/PM_{10}		Gas	14.7	0.7		10.7
		Oil	58.0		414	
SO_2		Gas	4.9	0.25		4.0
		Oil	538		1,582	

CT - Combustion Turbine
DB - Duct Burner

NOTES: * Refers to the maximum facility emissions (four CTs).
With capacity factor limitations of 25 percent on oil.

** ppm NO_x, dry, corrected to ISO standard ambient air conditions at 15 percent oxygen.

NO_x emissions from duct burners are based on an as-fired emission limitation of 0.11 lbs/mmBTU.

The permittee shall calculate an appropriate lbs/mmBTU emission factor for each pollutant based on the compliance tests heat input rates/steam injection rate/emission measurements. After submittal to and approval by the Department, the permittee shall program the on site computer system to calculated and record the emissions of each pollutant for each CT. Results shall be reported as lbs/hr and TPY.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION, LAUDERDALE REPOWERING PROJECT, FLORIDA POWER & LIGHT CO.	)	CERTIFICATION NO. PA 89-26

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On January 10, 1991, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification for Florida Power & Light Company's (FPL) Lauderdale Repowering Project. That certification order approved the construction and operation of a natural gas/oil fired combined cycle facility and associated facilities to be located in Broward County, Florida. Subsequently, on November 11, 1992, the Department issued a final order modifying the certification to authorize certain changes to the facilities and buildings on the Lauderdale site.

On March 12, 1993, FPL filed a request to modify the conditions of certification pursuant to section 403.516(1)(b), F.S. FPL requested that the conditions be modified to approve several recently identified changes to the project design and operation. These proposed changes include changing SO_2 emission rates to correspond with sulfur concentrations in the natural gas and changing heat input limits to reflect the decision not to install duct burners in the combined cycle units at this time. FPL also proposed the

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE ASAP

	Initial	Date
1. TO: (NAME, OFFICE, LOCATION) Teresa Heron		
2. Preston Lewis OK, GPL 7/13		
3. ~~John Brown~~ JS		
4.		

Teresa, If you agree call Gary and let him know GPL 7/13

REMARKS:

Please review the attached final order so that I may submit it to Secretary Wetherell. Be sure we are complying with all Federal and Florida requirements. Thanks!

INFORMATION
- Review & Return
- Review & File
- Initi

DISP
- Review
- Prepare R
- For My Signature
- For Your Signature
- Let's Discuss
- Set Up Meeting
- Investigate & Report
- Initial & Forward
- Distribute
- [X] Concurrence
- For Processing
- [X] Initial & Return

Preston - Teresa is on annual leave. HELP! Gary

DATE 7-12-93

FROM: Gary Broadbridge, Room 625E, TT

PHONE 1-9636

7/15/93 - Sent Comments to G-S; unk

certification be modified to reflect the more stringent limits on oil firing of the units contained in the separate Prevention of Significant Deterioration permit for the project. FPL submitted changes to several conditions of certification to address the proposed changes.

Copies of FPL's request were distributed to all parties to the certification proceeding and made available for public review. On March 19, 1993, a Notice of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. As of April 23, 1993, all of the parties to the original proceeding had received copies of the intent to modify. The notices specified that a hearing would be held if requested by a party within 45 days from receipt of the proposed Department's modification or if requested by a person, who had a substantial interest, within 30 days of publication of the notice. A hearing was not requested and written objections to the Department's proposed modifications were not received.

Accordingly, in the absence of any dispute,

IT IS ORDERED:

The proposed changes to the Lauderdale Repowering Project, described in the March 12, 1993, request for modification, are approved based on the absence of any request for a hearing or written objections. The Department hereby approves the requested modifications, and, pursuant to

Section 403.516(1)(b), F.S., the Department hereby modifies the conditions of certification for the Lauderdale Repowering Project as follows:

II.A Emission Limitations for LRP

1. When the duct burners are installed, t~~T~~he maximum heat input to each combustion turbine (CT) shall neither exceed 1,685.0 MMBtu/hr while firing natural gas, nor 1,646.9 MMBtu/hr while firing fuel oil (@75°F). Each CT's fuel consumption shall be continuously measured and recorded. The maximum heat input to each duct burner shall not exceed 90.62 MMBtu/hr. Each duct burner's fuel consumption shall be continuously measured and recorded.

Until the duct burners are installed, the maximum heat input to each CT shall neither exceed 1,775.62 MMBtu/hr while firing natural gas nor 1,646.9 MMBtu/hr while firing fuel oil (@75°F). Each CT's fuel consumption shall be continuously measured and recorded.

* * *

2. Each of the four CT's may operate continuously, i.e., 8,760 hrs/year provided that the total (four turbines) annual heat input attributed to light-distillate fuel oil firing does not exceed 14,426,844 ~~23,082,950~~ MMBtu (@75°F) and the total heat input for ~~all~~ four turbines and the duct burners does not exceed 54,129,421 MMBtu.

* * *

5. The maximum allowable sulfur (total) content of natural gas burned at this facility shall not exceed 10 grains per 1,000 cubic feet (gr/1,000 CF). The permittee shall monitor the sulfur content of the natural gas by the customized fuel monitoring schedule approved by EPA. The sulfur content of the fuel oil shall not exceed a maximum of 0.3 percent and shall not exceed an average of 0.2 percent during any 12-month period. In accordance with the BACT determination, the maximum allowable emissions from each CT and duct burner shall not exceed any of the following emission limitations:

* * *

MAXIMUM ALLOWABLE EMISSIONS PRIOR TO THE INSTALLATION OF THE DUCT BURNERS*

Pollutant	Basis	Fuel	Emission Limitations lb/hr/CT	4 CTs (TPY)
NO_x***	42 ppmvd	Gas	264	4,868
	65 ppmvd	Oil	422	
VOC	1 ppmvd	Gas	1.3	50
	6 ppmvd	Oil	7.8	
CO	30 ppmvd	Gas	89	1,489
	33 ppmvd	Oil	100	
PM/PM_{10}		Gas	14.7	
		Oil	58.0	424.7
SO_2		Gas	4.9	
		Oil	538	1,582.8

CT - Combustion Turbine
DB - Duct Burners

NOTES:

* The table has been added to reflect removal of the duct burners and reallocation of the annual emissions to the CTs.

** This column refers to the maximum facility emissions (four CTs) with capacity factor limitations of 25 percent on oil.

*** The ppm of NO_x (dry) has been corrected to ISO standard ambient air conditions and 15 percent oxygen.

MAXIMUM ALLOWABLE EMISSION LIMITS WITH THE DUCT BURNERS INSTALLED

Pollutant	Basis	Fuel	lb/hr/CT (TPY)	lb/hr/DB (TPY)	Emission Limitations 4 CT	4DB
NO_x**	42 ppmvd	Gas	264	10.0		152
	65 ppmvd	Oil	422		4,716 ~~5,131~~	
VOC	1 ppmvd	Gas	1.3	2.0		30.5
	6 ppmvd	Oil	7.8		48.3 ~~65.2~~	
CO	30 ppmvd	Gas	89	17.6		268
	33 ppmvd	Oil	100		1,405 ~~1,434~~	
PM/PM_{10}		Gas	14.7	0.7		10.7
		Oil	58.0		414 ~~528~~	
SO_2		Gas	4.9 ~~.97~~	0.25 ~~.05~~		4.0 ~~.8~~
		Oil	538		1,578.2 ~~2,413~~	

CT - Combustion Turbine
DB - Duct Burners

NOTES: * This table refers to the maximum facility emissions (four CTs) with capacity factor limitations of 25 percent on oil ~~and 87 percent for the facility~~.

** The ppm of NO_x (dry) has been corrected to ISO standard ambient air conditions at 15 percent oxygen.

~~+ Refers to maximum duct burner emissions at 87 percent capacity factor.~~

NO_x emissions from duct burners are based on an as-fired emission limitation of 0.11 lbs/MMBtu.

The permittee shall calculate an appropriate lbs/MMBtu emission factor for each pollutant based on the compliance tests heat input rates/steam injection rate/emission measurements. After submittal to and approval by the Department, the permittee shall program the on site computer system to calculate and record the emissions of each pollutant for each CT. Results shall be reported as lbs/hr and TPY.

~~Sulfur dioxide emissions assume a maximum of 0.3 percent sulfur in fuel oil for hourly emissions and an average sulfur content of 0.2 percent for annual emissions.~~

All modifications to the original certification shall conform and comply with the following, as appropriate:

Stationary Sources - Chapters 17-296 and 17-297, F.A.C.

Potable Water - Chapters 17-4, 17-531, 17-532, 17-550, 17-555, and 17-560, F.A.C.

Industrial Waste - Chapters 17-4, and 17-660, F.A.C.

Stormwater - Chapters 17-4, and 17-25, F.A.C.

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this _____ day of _____, 1993 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

_____
VIRGINIA B. WETHERELL
Secretary

Marjory Stoneman Douglas Bldg.
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (904) 487-0472

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was sent by U.S. Mail to the following this _____ day of _____, 1993.

Douglas S. Roberts
Hopping Boyd Green & Sams
P.O. Box 6526
Tallahassee, FL 32314

David Jordan, Senior Attorney
Department of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

Sara Nall
South FL Water Management District
P.O. Box 24680
3301 Gun Club Road
West Palm Beach, FL 33416-4680

M. B. Adelson
Assistant General Counsel
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Noel M. Pfeffer
Deputy County Attorney
Broward County
115 South Andrews Avenue
Suite 423
Fort Lauderdale, FL 33301

Michael Palecki
Division of Legal Services
Florida Public Service Commission
101 East Gaines Street
Fletcher Building, Room 212
Tallahassee, FL 32399-0850

Susan M. Coughanour
South FL Water Management District
P.O. Box 24680
3301 Gun Club Road
West Palm Beach, FL 33416-4680

James Antista
General Counsel
FL Game and Fresh Water Fish Commission
Bryant Bldg.
620 S. Meridian Street
Tallahassee, FL 32399-1600

William Roberts
Assistant General Counsel
Department of Transportation
Haydon Burns Building
605 Suwanee Street, M.S. #58
Tallahassee, FL 32399

Thomas R. Henderson
Broward County Resource Recovery Facility
114 South Andrews Avenue
Fort Lauderdale, FL 33301

FACSIMILE COVER SHEET

FPL

FLORIDA POWER & LIGHT COMPANY
GOLDEN BEAR
11770 U.S. HIGHWAY ONE
P. O. BOX 088801
NORTH PALM BEACH, FLORIDA 33408-8801

FPL Lauderdale
UTM
17 - 580.1 km E
2883.3 km N

DATE: 5/25/93 19 ____

SEND TO:

NAME: Willard Hanks

COMPANY ____

FACSIMILE PHONE NUMBER: ____

PHONE NUMBER/EXTENSION: ____

FROM: Don MacDougall
ENVIRONMENTAL AFFAIRS DEPARTMENT (JEN/GB)

PHONE NUMBER (407) 625- 7661

TOTAL NUMBER OF PAGES (INCLUDING COVER PAGE): 3

SPECIAL INSTRUCTIONS:

minor comments on Lauderdale's mod.

JEN/GB FACSIMILE PHONE NO: (407) 625-7666

FACSIMILE OPERATOR/TELEPHONE NO: ____ / (407) 625____

DRAFT

SPECIFIC CONDITION NO. 5

The maximum allowable sulfur (total) content of the natural gas burned at this facility shall not exceed 10 grains per 1,000 cubic feet (gr/1000 CF). The permittee shall monitor the sulfur content of the natural gas by the customized fuel monitoring schedule approved in EPA's April 8, 1993, letter to the Department (as may be appropriately amended). The sulfur content of the fuel oil shall not exceed a maximum of 0.3 percent and shall not exceed an average of 0.2 percent during any 12-month period.

In accordance with the BACT determination, the maximum allowable emissions from each CT and duct burner shall not exceed any of the following emission limitations:

MAXIMUM ALLOWABLE EMISSIONS PRIOR TO THE INSTALLATION OF THE DUCT BURNERS

Pollutant	Basis	Fuel	Emission Limitations** lb/hr/CT	4 CT* (TPY)
NOx***	42 ppmvd	Gas	264	4,868
	65 ppmvd	Oil	422	
VOC	1 ppmvd	Gas	1.3	50
	6 ppmvd	Oil	7.8	
CO	30 ppmvd	Gas	89	1,489
	33 ppmvd	Oil	100	
PM/PM10		Gas	14.7	
		Oil	58.0	424.7
SO2		Gas	4.9	
		Oil	538	1,629

CT - Combustion Turbine
DB - Duct Burner

NOTES: * Refers to the maximum facility emissions (four CTs); with capacity factor limitations of 25 percent on oil.
** Table revised to reflect removal of the duct burners and reallocation of the annual emissions to the CTs.
*** ppm NO_x (dry) corrected to ISO standard ambient air conditions and 15 percent oxygen.

DRAFT

MAXIMUM ALLOWABLE EMISSION LIMITS WITH THE DUCT BURNERS INSTALLED

Pollutant	Basis	Fuel	Emission Limitations lb/hr/CT	lb/hr/DB	4 CT* (TPY)	4 DB+ (TPY)
NOx	42 ppmvd	Gas	264	10.0		152
	65 ppmvd	Oil	422		4,716	
VOC	1 ppmvd	Gas	1.3	2.0		30.5
	6 ppmvd	Oil	7.8		48.3	
CO	30 ppmvd	Gas	89	17.6	1,405	268
	33 ppmvd	Oil	100			
PM/PM10		Gas	14.7	0.7		10.7
		Oil	58.0		414	
SO2		Gas	4.9	0.25		4.0
		Oil	538		1,625	

CT - Combustion Turbine
DB - Duct Burner

NOTES: * Refers to the maximum facility emissions (four CTs); with capacity factor limitations of 25 percent on oil.
** ppm NO_x (dry) corrected to ISO standard ambient air conditions and 15 percent oxygen.

NO_x emissions from duct burners are based on an as-fired emission limitation of 0.11 lbs/MMBtu.

The permittee shall calculate an appropriate lb/MMBtu emission factor(s) for each pollutant based on the compliance tests heat input rates/steam injection rate/emission measurements. After submittal to and approval by the Department, the permittee shall program the on site computer system to calculate and record the emissions of each pollutant for each CT. Results shall be reported as lbs/hr and TPY.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit

FACSIMILE COVER SHEET

FPL

FLORIDA POWER & LIGHT COMPANY
GOLDEN BEAR
11770 U.S. HIGHWAY ONE
P. O. BOX 088801
NORTH PALM BEACH, FLORIDA 33408-8801

DATE: 5/26/93 19 ____

SEND TO:

NAME: Willard Hanks

COMPANY ____

FACSIMILE PHONE NUMBER: ____

PHONE NUMBER/EXTENSION: ____

FROM: Dan MacDougall
ENVIRONMENTAL AFFAIRS DEPARTMENT (JEN/GB)

PHONE NUMBER (407) 625- 7661

TOTAL NUMBER OF PAGES (INCLUDING COVER PAGE): ~~3~~ 4

SPECIAL INSTRUCTIONS:

~~[illegible] comments on [illegible]'s~~
~~[illegible]~~

The two circled items are the only two changes that are needed so that we now have no increase in annual emissions,

JEN/GB FACSIMILE PHONE NO: (407) 625-7666

[illegible] OPERATOR/TELEPHONE N[illegible]: ____ / (407) 625____

FPL

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

May 26, 1993

Mr. Willard Hanks
DER/Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Lauderdale Plant
PSD-FL-145, PA89-26
Revision to Request to Modify PSD Permit

Dear Mr. Hanks:

After review of the Department's draft PSD permit modification, FPL would like to propose the following additional change. FPL would like to change the total annual TPY SO_2 emission limit from the requested 1629 TPY to the original 1582.8 TPY. This change will result in no increase in annual emission as compared to the original permit. Enclosed is a copy of appropriate pages of the draft permit which have been marked up to reflect FLP's latest request.

If you have any questions please call me at (407) 625-7661.

Sincerely,

Dan MacDougall
Environmental Specialist
Environmental Affairs

DRAFT

SPECIFIC CONDITION NO. 8

The maximum allowable sulfur (total) content of the natural gas burned at this facility shall not exceed 10 grains per 1,000 cubic feet (gr/1000 CF). The permittee shall monitor the sulfur content of the natural gas by the customized fuel monitoring schedule approved in EPA's April 8, 1993, letter to the Department. The sulfur content of the fuel oil shall not exceed a maximum of 0.3 percent and shall not exceed an average of 0.2 percent during any 12-month period.

(as may be appropriately amended)

In accordance with the BACT determination, the maximum allowable emissions from each CT and duct burner shall not exceed any of the following emission limitations:

MAXIMUM ALLOWABLE EMISSIONS PRIOR TO THE INSTALLATION OF THE DUCT BURNERS

			Emission Limitations	
Pollutant	Basis	Fuel	lb/hr/CT	4 CT* (TPY)
NOx***	42 ppmvd	Gas	264	4,868
	65 ppmvd	Oil	422	
VOC	1 ppmvd	Gas	1.3	50
	6 ppmvd	Oil	7.8	
CO	30 ppmvd	Gas	89	1,489
	33 ppmvd	Oil	100	
PM/PM10		Gas	14.7	
		Oil	58.0	424.7
SO2		Gas	4.9	
		Oil	538	~~1,622~~ 1582.6

CT - Combustion Turbine
DB - Duct Burner

NOTES: * Refers to the maximum facility emissions (four CTs); with capacity factor limitations of 25 percent on oil.
** Table revised to reflect removal of the duct burners and reallocation of the annual emissions to the CTs.
*** ppm NO_x (dry) corrected to ISO standard ambient air conditions and 15 percent oxygen.

DRAFT

MAXIMUM ALLOWABLE EMISSION LIMITS WITH THE DUCT BURNERS INSTALLED

Pollutant	Basis	Fuel	Emission Limitations lb/hr/CT	lb/hr/DB	4 CTs* (TPY)	4 DBs* (TPY)
NOx**	42 ppmvd	Gas	264	10.0		152
	65 ppmvd	Oil	422		4,716	
VOC	1 ppmvd	Gas	1.3	2.0		30.5
	6 ppmvd	Oil	7.8		48.3	
CO	30 ppmvd	Gas	89	17.6	1,405	268
	33 ppmvd	Oil	100			
PM/PM10		Gas	14.7	0.7		10.7
		Oil	98.0		414	
SO2		Gas	4.9	0.25		4.0
		Oil	538			
					5178.8	

CT - Combustion Turbine
DB - Duct Burner

NOTES: * Refers to the maximum facility emissions (four CTs); with capacity factor limitations of 25 percent on oil.
** ppm NO_x (dry) corrected to ISO standard ambient air conditions and 15 percent oxygen.

NO_x emissions from duct burners are based on an as-fired emission limitation of 0.11 lbs/MMBtu.

The permittee shall calculate an appropriate lb/MMBtu emission factor(s) for each pollutant based on the compliance tests heat input rates/steam injection rate/emission measurements. After submittal to and approval by the Department, the permittee shall program the on site computer system to calculate and record the emissions of each pollutant for each CT. Results shall be reported as lbs/hr and TPY.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit

FACSIMILE COVER SHEET

FPL

FLORIDA POWER & LIGHT COMPANY
GOLDEN BEAR
11770 U.S. HIGHWAY ONE
P. O. BOX 088801
NORTH PALM BEACH, FLORIDA 33408-8801

DATE: _____ 19 ____

SEND TO:

NAME: Willard Hanks

COMPANY _____

FACSIMILE PHONE NUMBER: 904-922-6479

PHONE NUMBER/EXTENSION: _____

FROM: Dan MacDougall
ENVIRONMENTAL AFFAIRS DEPARTMENT (JEN/GB)

PHONE NUMBER (407) 625-7661

TOTAL NUMBER OF PAGES (INCLUDING COVER PAGE): 3

SPECIAL INSTRUCTIONS:

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JEN/GB FACSIMILE PHONE NO: (407) 625-7666

FACSIMILE OPERATOR/TELEPHONE NO: _____ / (407) 625____

TO Willard Hanks 5/20/93

From Dan MacDougall

re Lauderdale Repowering Project
SO2 emission Calculation

Current PSD Permit Limit

oil firing

Short term 538 lb/hr/CT (0.3% Sulfur in oil)

Long term rate is based on 0.2% Sulfur in oil

Therefore $\frac{(538)(0.2)}{(0.3)} = 358.7$ lb/hr/CT

gas firing = 0.97 lb/hr/CT & 0.05 lb/hr/DB

Based on permitted annual heat input & operational limits

54,129,421 mmBTU – all units both fuel

14,428,844 mmBTU – CTs on oil

oil firing 25% = 2190 hrs

gas firing 97% – 25% = 62% or 5431.2 hr

Total annual emissions are

oil (2190 hr)(358.7 lb/hr/CT)(4 CT)/2000 TPY = 1571.1 TPY

gas CT (5431.2 hr)(0.97 lb/hr/CT)(4 CT)/2000 TPY = 10.5 TPY

gas DB (5431.2 hr)(0.05 lb/hr/CT)(4 DB)/2000 TPY = 0.54 TPY

1582.1 TPY

Permitted

Proposed PSD Limit

oil – No change

Therefore 1571.1 TPY

gas 4.9 lb/hr/CT

0.25 lb/hr/~~CT~~ DB

Therefore

$(5431.2\ hr)(4.9\ lb/hr/CT)(4\ CT)/2000 = 53.2\ TPY$

$(5431.2\ hr)(0.25\ lb/hr/DB)(4\ DB)/2000 = 2.7\ TPY$

Total Annual emission = 1627 TPY oil/gas = DB

However FPL has requested to [redacted] the specific requirement for [redacted] (total) + [redacted] = with 25% CF on oil + to use the available heat input allowed which would be

54 129 421 mmBtu – 14 426 844 mmBtu (25% oil) = 39 702 577 mmBtu

Therefore ~~39 702 577 mmBtu / (1655 mmBtu/hr/CT + 90.62 mmBtu/hr/CT) 4~~ = ~~5589.9 hr of gas~~ operation

using max available hours on gas Total emissions are

$(5589.9\ hr)(4.9\ lb/hr/CT)(4\ CT)/2000 = 54.8\ TPY$

$(5589.9\ hr)(0.25\ lb/hr/DB)(4\ DB)/2000 = 2.7\ TPY$

= 57 TPY

FPL's requested SO_2 annual emissions

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

May 18, 1993

Mr. Hamilton S. Oven, Jr. PE.
Florida Department of Environmental Regulation
2600 Blair Stone Rd Room 612
Tallahassee, FL 32399

Re: **Lauderdale Repowering Project**
PA 89-26 Modification Request
Response to Letter Dated May 5, 1993

Dear Mr. Oven:

In response to your letter dated May 5, 1993, FPL submits the following responses to the comments of the Department concerning our March 12, 1993, request for modification of the Site Certification for the Lauderdale Repowering Project. The actual Department comments have been repeated prior to FPL's response in order to provide a complete and coherent picture.

1.) REQUEST TO INCREASE SULFUR DIOXIDE (SO_2) EMISSION FROM EACH CT FROM 0.97 LBS/HR TO 4.9 LBS/HR. --The proposed limit of 4.9 lbs/hr is based on natural gas containing 10 gr/1000 cf of sulfur. The 1990 analytical data from Florida Gas Transmission Company showed the natural gas averaged 4.3 gr/1000 cf and had a maximum sulfur content of 8.0 gr/1000 cf in 1990. Please provide additional support (analysis from other years, statement from an officer of Florida Gas Transmission Company, etc.) to justify any higher sulfur content for the natural gas than was shown in the 1990 data. After the projected sulfur content of the natural gas is established, recalculate the increase in SO_2 emission. Address any changes this increase in emission will have on the ambient air impact.

RESPONSE: FPL decided to base the SO_2 emission from the CT on 10 gr/1000 cf because it provided a slight safety margin over the maximum reported values in 1990 of 8.0 gr/1000 cf. Section 2.2(b) of Attachment A (FERC Gas Tariff for FGT) states that the natural gas may have a sulfur content as high as 200 gr/ 1000 cf. While this is the theoretical maximum, this value is expected to occur only under rare pipeline failures where the gas supply will be suspended until the situation has been resolved. Therefore, FPL has elected to use a reasonable sulfur value in the natural gas instead of the worst case transient value.

As currently proposed, the SO_2 emission for each CT is 4.9 lb/hr when firing natural gas. The Project impacts were originally modeled using 0.5 percent sulfur fuel oil for 8760 hours (860.89 lb/hr or 3770.7 TPY at 75 F). All standards were predicted to be met by the modeling at this level of sulfur content. During the Site Certification process, FPL elected to use a lower sulfur oil (0.2 percent annual average and 0.3 percent maximum) and to reduce the hours of operation on oil to 40 percent of the time (3504 hr) to primarily reduce the NO_x values to a more realistic level. The SO_2 emission from the Project under this scenario was 538 lb/hr or 2413 TPY. Prior to the issuance of the final PSD permit, FPL agreed again to reduce the hours of oil operation to 25 percent or 2190 hours. The SO_2 emission from the Project when firing oil 25 percent of the time is 1570.96 TPY while the expected emission from the Project on natural gas is only 57.7 TPY when using 4.9 lb/hr. As can be seen, the proposed emission of 4.9 lb/hr on gas will not adversely affect ambient air quality since the Project impacts were previously analyzed based on oil firing which has a much greater SO_2 emission than natural gas even at the requested increased sulfur content.

As discussed with the Department's staff, FPL has obtained approval from the USEPA of a customized fuel monitoring schedule for the Lauderdale Repowering Project. A copy of that letter is attached as Attachment B hereto.

2.) REQUEST TO REALLOCATE THE FUEL BURNED IN THE DB TO THE CT--The PSD permit limits each duct burner to 90.62 MMBtu/hr of natural gas. Is your request to burn additional 90.62 MMBtu/hr of either natural gas or distillate oil in each CT? Either way, there will be an increase in air pollutant emissions from the CT unless the emission factors (lbs/MMBtu) for some pollutants are reduced. Please provide a table showing the proposed emissions factors, emissions (lb/hr and TPY), and change in emissions (TPY) under the worst fuel burning scenario. The table should be based on the amendment being approved and cover natural gas and distillate oil fuels along with each regulated air pollutant in the permit.

RESPONSE: FPL is proposing to increase the CT permitted hourly input rate only when firing natural gas by the requested 90.62 MMBbtu/hr, which is the heat input rate originally allocated to the duct burners. FPL will conduct the stack compliance test within 10% of the proposed maximum heat input rate of 1775.62 MMBtu/hr as authorized by Specific Condition 10 of the PSD permit for the Project. Since the permit limits pollutant emissions to a maximum lb/hr value, FPL will calculate a lb/MMBtu emission curve for each pollutant based on the various compliance test heat input rates and on the lb/hr emissions of each tested pollutant. These curves will

be input into the onsite computer system and will track the emissions of each pollutant based upon fuel flow to each CT Therefore, FPL will be able to calculate compliance with the permitted lb/hr emission limit by multiplying the recalculated emission factor of the tested pollutant by the actual heat input rate.

On an annual basis, FPL is limiting the CT emissions to no greater than the sum of the emissions from the CT and the duct burners as follows:

	CT TPY	DB TPY	Project TPY	Proposed Limit (TPY)	Percent Change
NO_x	4716	152	4868	4868	0
VOC	48.3	30.5	78.8	50	-36
CO	1405	268	1673	1489	-11
PM/PM_{10}	414	10.7	424.7	424.7	0
SO_2 *	1625	4.0	1629	1629	0

***Based on maximum permitted annual oil use (25%) and balance of operation on gas at 4.9 lb/hr of SO_2.**

Therefore, there will be no greater impact on the ambient air quality with the natural gas reallocated from the DB to the CT. In fact for VOC and CO the impact will be less with the reallocated natural gas due to the improved operating efficiencies of the CTs as compared to the duct burners.

3.) PSD SPECIFIC CONDITION 2--Please review specific condition No. 2 along with the other specific conditions of the permit and note any changes your requested amendment would have on them.

RESPONSE: There are no changes required to Specific Condition 2 of the PSD permit due to this pending request. However, FPL is requesting that the Site Certification conditions be conformed to the PSD permit and therefore, Condition of Certification II.A.2 needs to be revised to reflect the reduced annual allowance of fuel oil from 23,082,950 to 14,426,844 MMBtu at 75 F.

If you have any questions about these responses, Please call me at (407) 625-7661.

Sincerely,

Daniel M MacDougall /DSR

Daniel M MacDougall
Environmental Specialist
Environmental Affairs

cc: Clair Fancy DER/TAL
Preston Lewis DER/TAL
Willard Hanks DER/TAL

GENERAL TERMS AND CONDITIONS
(continued)

(d) shall contain not more than ten (10) grains of total sulphur per one hundred (100) cubic feet of gas;

(e) shall contain not more than a combined total three percent (3%) by volume of carbon dioxide and/or nitrogen;

(f) shall contain not more than one quarter percent (1/4%) by volume of oxygen;

(g) shall have a temperature of not more than one hundred twenty (120) degrees Fahrenheit; and

(h) shall have a BTU content of not less than nine hundred fifty (950) BTU per cubic foot.

(i) Seller may refuse to accept any gas which fails to conform with the quality standards itemized in (a) through (h) above. Seller, in its reasonable discretion exercised on a not unduly discriminatory basis, may waive the quality standards for gas delivered into its pipeline system at receipt points, provided that such waiver will not affect Seller's ability to maintain an acceptable gas quality in its pipeline and adequate service to its customers consistent with the applicable Rate Schedule and these General Terms, including (without limitation) Section 2.2 below.

2.2 The gas delivered by Seller to Buyer shall conform to the following standards:

(a) The gas shall be natural gas, or its equivalent as provided for in 2.2(c) below, from the sources of supply attached or delivered to Seller's pipeline system; provided, however, that moisture, impurities, helium, natural gasoline, butane, propane, and other hydrocarbons or other substances, may be removed prior to delivery to Buyer. Seller may subject or permit the subjection of the gas to compression, heating, cooling, cleaning or other processes, which are not substantially detrimental to the merchantability of the gas.

GENERAL TERMS AND CONDITIONS
(continued)

(b) The gas shall have a total heating value of not less than 950 Btu per cubic foot of dry gas, and be reasonably free of moisture, objectionable liquids and solids so as to be merchantable upon delivery to Buyer, and shall contain not more than 200 grains of total sulphur, nor more than 15 grains of hydrogen sulphide, per MCF. The gas may contain an odorant at the point of delivery, but it is the responsibility of the customer to monitor and maintain any required odorant levels after the point of delivery.

NOTE - MCF HERE DENOTES 1,000 CUBIC FEET.

(c) Seller may permit its supplier to supply, or it may itself supply gas from any standby equipment installed by it or by such supplier, provided the gas so supplied shall be reasonably equivalent to the natural gas supplied hereunder, and adopted for use by Buyer's consumers without the necessity of making adjustments to fuel-burning equipment.

3. PRESSURE:

Gas shall be delivered at such uniform pressure as Buyer may reasonably require, and as Seller may agree to, up to but not exceeding one hundred (100) pounds per square inch gauge at the point of delivery provided however, Seller may grant an increase in pressure from time to time above one hundred (100) pounds per square inch gauge if Seller determines in its sole discretion that such increase would not adversely affect the operation of Sellers' pipeline system or would not otherwise impair or inhibit Sellers' ability to deliver gas to its other customers. Buyer shall be required to install, operate and maintain such regulating devices as may be necessary to regulate the pressure after delivery to Buyer.

4. MEASUREMENT:

The volume and total heating value of the gas shall be determined as follows:

a. Sales Unit. Except as otherwise expressly provided, the unit of the gas sold shall be the therm, consisting of one hundred thousand (100,000) British thermal units. The number of therms received or delivered shall be determined by multiplying the

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4APT-AE

APR 08 1993

Mr. Clair H. Fancy, Chief
Bureau of Air Permitting
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399

RE: FPL Lauderdale Repowering Project PA 89-26, PSD-FL-145
Customized Fuel Monitoring Schedule

Dear Mr. Fancy:

This letter is in response to FPL's March 12, 1993, request for approval of a customized fuel monitoring schedule for the above referenced project. This request was addressed to you and a copy was sent to Region IV. Since the authority for implementing §60.334(b) of 40 CFR Part 60, Subpart GG was not delegated to the State of Florida, we have reviewed FPL's custom fuel monitoring schedule and have determined that it is acceptable, because it conforms to custom fuel monitoring guidance (a copy of this guidance memo was included in the FPL's March 12, 1993, letter) issued by EPA Headquarters in 1987. Therefore, you may modify FPL's permit accordingly.

If you have any questions regarding the determination provided in this letter, please contact Mr. Mirza P. Baig of my staff at 404/347-5014.

Sincerely yours,

for Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

cc: Mr. Mike Harley, FDER
Mr. Charles Logan, FDER

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

FPL

March 30, 1993

Mr. C. H. Fancy, Chief
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

RE: FPL Lauderdale Plant
AC 06-179848 and AO 06-199041
Air Construction Permit Amendment

Dear Mr. Fancy:

On October 30, 1990, the Department issued FPL an air construction (AC 06-179848) permit for the Lauderdale Plant. The air construction permit authorized minor changes to the onsite storage tanks and piping, demolition of storage tank 4, and the establishment of federally enforceable permit limits which resulted in the plant being a minor VOC source. This work was conducted prior to the Lauderdale Repowering Project (PSD-FL-145).

On September 25, 1991, the District issued an air operating permit (AO 06-199041) for the Lauderdale Plant based on the air construction permit. FPL filed a request to be granted additional time in which to request a hearing on the air operating permit. On December 2, 1991, FPL provided comments on the air operating permit to the District office. It was discussed with the District staff that some comments could be handled by the District office and others had to the revised by the Department in Tallahassee. FPL through Mr. Peter Cunningham of Hopping, Boyd, Green & Sams had discussion with Department staff about FPL's comments on the air operating permit and the need to revise the air construction permit in order for the District to then modify the air operating permit.

On February 16, 1993, the Department advised FPL that the District office would make the modifications to the air operating permit that they were authorized to make and that the Department would correct the gas flow measurement typographic errors (MCFH instead of MMCFH in the air construction permit). (The District office on February 24, 1993, issued a letter modifying the air operating permit exclusive of the gas flow measurement errors.) The Department also requested that FPL formally amend the air construction permit in order to resolve FPL's remaining comments on the air operating permit.

FPL is hereby requesting that the air construction permit (AC 06-179848) be revised as follows and that the District then modify the air operating permit accordingly:

1) Page 1 of 11 Paragraph 2 Line 6-- The "Two 1,500 gallon underground gas turbine dump tanks" should be "one 1,500 gallon and one 2,500 gallon underground gas turbine dump tanks".

N · O · T · E · S

4/6

John Brown —

pls handle. Willard did this permit —

Clair

Preston [illegible] 4/8/93

Willard —

4-12-93

Patty,

U. have a copy of this.

wmh

2) Page 9 of 11 Specific Condition 21-- Add "Note: Usage may be determined on the basis of time of operation versus total fuel consumption for a block of 12 units." at the end of this condition.

3) Page 10 of 11 Specific Condition 24-- This condition should be replaced with the following text: "The use of solvents for maintenance of the existing facility shall be tracked and controlled during each calendar year. The VOC emission from solvents shall be calculated by the following method: The solvent volume loss shall be equal to the total solvent volume purchased/in stock minus the solvent volume reclaimed/disposed of offsite. The solvent volume loss shall then be multiplied by the emission factor (mass VOC/ unit of solvent) to get a TPY value. The total solvent TPY emission value will be added to all other VOC sources to ensure compliance with Specific Condition 26."

FPL originally installed the two gas turbine dump tanks in the mid 70's at the Lauderdale Plant. At that time two 1,500 gallon single walled steel tanks were installed underground. The one tank for GT Site 1, located within the containment area for fuel oil storage tank 4, was replaced with a 2,500 gallon new double walled fiberglass dump tank when it was relocated in anticipation of the Lauderdale Repowering Project. The 2,500 gallon tank that was installed did not get incorporated into the construction permit. The original estimate of VOC emission (0.003 TPY) from the two gas turbine dump tank is conservative since it was based on a total annual throughput of 300,000 gallons and in 1991 the total annual throughput was less than 3,000 gallons. The actual emission from these tanks is calculated annually in accordance with Section 4.3 of AP-42 in order to determine compliance with Special Condition 26.

FPL requests that the second revision be granted since the GT fuel flows for natural gas and distillate oil are not measured individually at each gas turbine but is measured by GT banks (12 GT per bank).

FPL requests that the Special Condition 24 be revised as indicated above. The basis for this request is to allow FPL operational and maintenance flexibility without exceeding the 99.92 TPY VOC emission limit. FPL proposed that the solvent loss be treated as a variable which is calculated annually and summed with all the other VOC sources to produce an annual total VOC emission for the entire site. The Annual Air Operating Report for 1991 showed that the total VOC emission of 17.12 TPY is well below the 99.92 TPY limit. FPL will not be circumventing the intent of the original condition since the VOC emission will be limited annually. The new solvent limit is changed from being an arbitrary limit of 250 gallons to a variable limit which when summed with all the other VOC emission sources will be less than the 99.92 TPY VOC emission limit.

If you have any question about this request please call me at (407) 625-7661.

Daniel M. MacDougall
Environmental Specialist
Florida Power & Light Company

cc: Tom Title-DER/WPB
Stephannie Brooks-DER/WPB
Mark Sittig-DER/WPB
Claire Lardner-DER/TAL
Willard Hanks-DER/TAL

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

FPL

March 12, 1993

Mr. C. H. Fancy, Chief
Bureau of Air Permitting
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399

RE: FPL Lauderdale Repowering Project
PA 89-26, PSD-FL-145
Customized Fuel Monitoring Schedule

Dear Mr. Fancy:

The repowered Units 4 & 5 at the FPL Lauderdale Plant have been permitted under the Power Plant Siting Act (Chp 403 Part II F.S.) and a corresponding PSD permit. These Units consist of 4 dual fuel fired "advanced" combustion turbines, with heat recovery steam generators (HRSG). The combustion turbines are subject to New Source Performance Standards (NSPS-40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any combustion turbine to monitor the sulfur and nitrogen content of the fuel as follows: 1) If the turbine fuel is supplied by a bulk storage tank then the sulfur and nitrogen content are to be determined whenever new fuel is transferred into the bulk storage tank and 2) If the turbine fuel is supplied without an intermediate bulk storage tank then daily monitoring of the sulfur and nitrogen content of the fuel is required. FPL has an intermediate bulk storage tank(s) for the light distillate oil and will test the sulfur and nitrogen content of the fuel oil as required by 40 CFR 60.334(b)(2).

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

1. Monitoring of natural gas nitrogen content shall not be required in accordance with page 2 of the EPA guidance memorandum and the attached enclosure.

2. Sulfur Monitoring

a. Analysis for sulfur content of the natural gas shall be conducted using one of the EPA approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3245-81; and ASTM D4048-82 as referenced in 40 CFR 60.335(b)(2).

b. Effective on the commercial operation date of the CTs or the approval date of the customized fuel monitoring schedule whichever is later, sulfur monitoring shall be conducted twice a month for six months. If this monitoring shows little variability in the sulfur content and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

c. If the monitoring required by 2(b), above, of the sulfur content of the natural gas shows little variability and the calculated sulfur dioxide emissions, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.

d. Should any sulfur analysis as required by items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, FPL will notify the Department of Environmental Regulation of such excess emission and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while this monitoring schedule is being reexamined.

3. FPL will notify the Department of Environmental Regulation of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e. sulfur content varying greater than 10 grains/1000 cf gas) shall be considered as a change in natural gas supply. Sulfur content of the natural gas will be monitored weekly during the interim period when this monitoring schedule is being reexamined.

4. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPL for a period of three years, and be available for inspection by appropriate regulatory personnel.

5. FPL will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Brooker Lab.

Data from natural gas at the Brooker Lab site is considered representative of the sulfur content of the natural gas at the Lauderdale site since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas. The data presented in Attachment B is based upon representative samples of natural gas taken by Florida Gas Transmission.

If you or you staff have any questions about this request please call me at (407) 625-7661.

Sincerely,

Daniel M. MacDougall/DSK

Daniel M. MacDougall
Environmental Specialist
Florida Power & Light Company

cc: Mike Harley, FDER
Charles Logan, FDER
David McNeal, Region IV, EPA

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

CARLOS ALVAREZ
JAMES S. ALVES
BRIAN H. BIBEAU
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
THOMAS M. DEROSE
WILLIAM H. GREEN
WADE L. HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

C. ALLEN CULP, JR
RALPH A. DEMEO
JAMES C. GOODLETT
RICHARD W. MOORE
ANGELA R. MORRISON
MARIBEL N. NICHOLSON
LAURA BOYD PEARCE
GARY V. PERKO
MICHAEL P. PETROVICH
DOUGLAS S. ROBERTS
JULIE B. ROME
KRISTIN C. RUBIN
CECELIA C. SMITH

OF COUNSEL
W. ROBERT FOKES

File John Brown - Preston

December 15, 1992

BY HAND-DELIVERY

RECEIVED

DEC 15 1992

Division of Air Resources Management

Daniel H. Thompson, Esquire
Office of General Counsel
Florida Department of Environmental Regulation
2600 Blair Stone Road, Room 654
Tallahassee, Florida 32399-2400

Re: Florida Power & Light Company
Lauderdale Power Plant
Air Operation Permit No. AO 06-199041

Dear Mr. Thompson:

On September 26, 1991, Florida Power & Light Company (FPL) received the above referenced air operation permit for its Lauderdale Power Plant, located in Broward County, Florida. The permit was issued by the Department's Southeast Florida District office and was signed by J. Scott Benyon, Director of District Management. By order dated October 22, 1992, FPL was granted an extension of time to and including December 15, 1992 in which to file a petition for administrative proceedings regarding the permit.

On behalf of FPL, I hereby request, pursuant to F.A.C. Rule 17-103.070, an extension of an additional sixty-two (62) days to, and including, February 15, 1993, in which to file a petition for administrative proceedings regarding the permit. As good cause for granting the request for extension of time for filing, FPL states the following:

1. The permit contains thirty-one (31) specific conditions, several of which appear to warrant clarification or correction.

2. An FPL representative has discussed the conditions in question with appropriate Department staff and submitted a letter regarding the same to Ms. Stephanie Brooks of the Southeast District office on December 2, 1991. (See Attachment "A".)

3. It is FPL's understanding that at least one of its suggested changes to the permit may require amendment of a condition in the underlying air construction permit (Permit No. AC 06-179848). Representatives of FPL intend to meet with staff of the Department's Bureau of Air Regulation in the near future to discuss this matter.

4. The two fossil fuel fired steam electric generating units formerly at the Lauderdale Plant (Units No. 4 and 5) and addressed in the subject permit have been dismantled and removed from the site as part of the Lauderdale Repowering Project. It would therefore be appropriate to conform the subject permit to reflect this change at the facility.

5. On December 9, 1992, the Florida Environmental Regulation Commission adopted amendments to Chapter 17-296, Florida Administrative Code, including new requirements for facilities that are major sources of volatile organic compounds and nitrogen oxides in Dade, Broward and Palm Beach Counties. In accordance with those rule amendments, FPL will be filing an application for a revised air operation permit for the Lauderdale Plant in the near future. FPL believes this permit process offers an excellent opportunity for resolution of all outstanding issues regarding the subject permit.

This request is filed simply as a protective measure to avoid waiver of FPL's right to challenge the permit as issued. Grant of this request will not prejudice either party, but will further their mutual interest and likely avoid the need to initiate formal administrative proceedings.

I hereby certify that I have attempted, without success, to contact both Claire Lardner and Pat Comer of the Department's Office of General Counsel regarding this request. I have discussed this matter with Clair Fancy, Chief of the Bureau of Air Regulation, and Mr. Fancy advised that, given the circumstances described in paragraphs 4 and 5 above, he does not object to the grant of this request.

I hereby request that you formally extend the time for filing a petition for administrative proceedings in regard to Department

air operation permit AO 06-199041 to and including February 15, 1993.

Respectfully submitted,

Peter C. Cunningham

/gbb

cc: Clair Fancy
Stephanie Brooks
Claire E. Lardner, Esq.
Pat Comer, Esq.
Dan MacDougall
Elsa Bishop

Attachment

P. O. Box 078768, West Palm Beach, FL 33407-0768

December 2, 1991

Ms. Stephanie Brooks
Department of Environmental Regulations
Southeast District
1900 S. Congress Avenue, Suite A
West Palm Beach, FL 33406

RE: Air Permit No: AO-06-199041
FPL Lauderdale Plant - Units 4 & 5
Gas Turbines 1 - 24 & Tanks

Dear Ms. Brooks:

After review of the above-referenced permit, FPL has the following comments:

- Page 1 of 7 Para 2 ¨ Change "An air pollution source" with "Air pollution source(s)" to be consistent with FAC definition.

- Page 1 of 7 bullet 4 ¨ The "Two 1,500 gallon underground gas turbine dump tanks" should be "one 1,500 gallon and one 2,500 gallon underground gas turbine dump tanks". The 2,500 gallon tank was installed during the construction permit but did not get incorporated into the operating permit.

- Page 4 of 7 Specific Condition 4 ¨ The "MMCFH" should be "MCFH" to be consistent with the values in the table.

- Page 5 of 7 Specific Condition 5 ¨ either "except" needs to be inserted in line 1 after opacity or the phrase "during the 3 hour period of excess emissions allowed for soot blowing and load changes", need to be deleted.

- Page 5 of 7 Specific Condition 11 ¨ The phrase "oil and 4.49 lbs/hr when they are burning" needs to be added after "burning" in the second line.

Attachment "A"

- Page 5 of 7 Specific Condition 13 -- The "MMCFH" should be "MCFH" to be consistent with Condition 4.

- Page 5 of 7 Specific Condition 16 -- "particular" should be "particulate" in line 7.

- Page 6 of 7 Specific Condition 20 -- The following note should be added to this Condition for clarification. "By FAC 17-2.250(1), excess emissions resulting from start-up, shut-down or malfunction shall be permitted providing (1) Best operational practices to minimize emissions are adhered to and (2) 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".

- Page 6 of 7 Specific Condition 21 -- "MMCFH" should be "MCFH" to be consistent with Condition 4. Also the following note should be added for clarification. "Note: Usage may be determined on the basis of time of operation versus total fuel consumption for a block of 12 units".

- Page 6 of 7 Specific Condition 22 -- The "10%" in line 3 should be "100%".

- Page 6 of 7 Specific Condition 24 -- This condition should be replaced with the following text: "The use of solvents for maintenance of the existing facility shall be tracked and controlled during each calendar year. The VOC emission from solvents shall be calculated by the following method: For each type of solvent the solvent volume loss shall be equal to the total solvent volume purchased/in stock minus the solvent volume reclaimed/disposed of off site. The solvent volume loss for each solvent type shall then be multiplied by the emission factor (% VOC/unit of solvent) to get a TPY value for that solvent type. The TPY value for all the solvent types shall then be summed to obtain a total solvent TPY emission value. This value will then be used to ensure compliance with Specific Condition 26." This revised condition is in keeping with the intent of the original condition but allows FPL sufficient flexibility to handle uncertaintities regarding maintenance and power generation.

Please call me at (407) 697-6930 or Dan MacDougall at (407) 697-6957 if you have any questions about these comments.

Sincerely,

Martin A. Smith, Ph.D.
Manager
Air and Water Permitting & Programs

MAS:mmk

Enclosure

cc: Scott Benyon - DER SE District
Clair Fancy - DER Tallahassee

P. O. Box 078768, West Palm Beach, FL 33407-0768

FPL

December 2, 1991

Ms. Stephanie Brooks
Department of Environmental Regulations
Southeast District
1900 S. Congress Avenue, Suite A
West Palm Beach, FL 33406

RE: Air Permit No: AO-06-199041
FPL Lauderdale Plant - Units 4 & 5
Gas Turbines 1 - 24 & Tanks

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Sincerely,

Martin A. Smith, Ph.D.
Manager
Air and Water Permitting & Programs

MAS:mmk

Enclosure

cc: Scott Benyon - DER SE District
Clair Fancy - DER Tallahassee