

File-

DEP ROUTING AND TRANSMITTAL SLIP	
TO: (NAME, OFFICE, LOCATION)	
1. <u>Mike Harley</u>	3. _____
2. _____	4. _____
5. _____	
PLEASE PREPARE REPLY FOR: <input type="checkbox"/> SECRETARY'S SIGNATURE <input type="checkbox"/> DIV/DIST DIR SIGNATURE <input type="checkbox"/> MY SIGNATURE <input type="checkbox"/> YOUR SIGNATURE <input type="checkbox"/> DUE DATE <u>10/27/00</u>	COMMENTS: <p>What's your opinion on this? Is an ASP for this needed?</p> <p>Approved AC for an initial VEC Test only. Marty 12/13</p> <p style="text-align: center;"> Bureau of Air Monitoring & Mobile Sources OCT - 5 2000 RECEIVED </p>
ACTION/DISPOSITION <input type="checkbox"/> DISCUSS WITH ME <input type="checkbox"/> COMMENTS/ADVISE <input type="checkbox"/> REVIEW AND RETURN <input type="checkbox"/> SET UP MEETING <input type="checkbox"/> FOR YOUR INFORMATION <input type="checkbox"/> HANDLE APPROPRIATELY <input type="checkbox"/> INITIAL AND FORWARD <input type="checkbox"/> SHARE WITH STAFF <input type="checkbox"/> FOR YOUR FILES	
FROM: <u>Scott Sheplek</u>	DATE: <u>10/3/00</u> PHONE: _____

Scott -file-



September 21, 2000

RECEIVED

OCT 02 2000

Clair H. Fancy
Chief - Bureau of Air Regulation
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Mail Station #5505
Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION

**Re: Administrative Change of Title V Permit No.: 0110037-001AV,
Lauderdale Power Plant, E.U. ID Nos. 035-038, Combined Cycle Combustion Turbine Units
CT4A, CT4B, CT5A, & CT5B**

Dear Mr. Fancy:

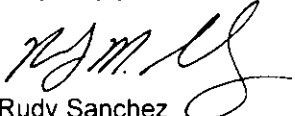
FPL would like to request a change to the Lauderdale Plant Title V permit referenced above, to make it more consistent with the Title V permit governing similar combined cycle units at FPL's Martin Plant regarding VOC testing frequency.

Recent discussions with Mike Harley indicate FDEP support for removing the annual VOC testing requirement at the Lauderdale Plant combustion turbines. The historically very low VOC levels (typically, less than one half PPM) lend credence to the contention that annual testing adds little, if any, value. The Martin Plant Title V Permit, Test Methods and Procedures, Page 30, Specific Condition B.27: requires an initial VOC test and no annual testing thereafter [Attachment No. 1].

FPL would like to propose the language in the Lauderdale Title V permit, Page 11, Test Methods and Procedures, Specific Condition A.19 be changed to delete the annual requirement for VOC testing [Attachment No. 2]. In addition, Table 2-1 Summary of Compliance Requirements should be changed to an initial VOC test and no annual testing [Attachment No. 3]. The initial VOC tests were conducted on the Lauderdale units 4A, 4B, 5A, and 5B between May 18th and August 2nd of 1993. The most recent VOC tests were conducted September 18 & 19, 2000.

Thank you for your assistance in this matter, and, if you should have any questions, please do not hesitate to contact Kevin Washington at (561) 691-2877.

Very truly yours,


Rudy Sanchez
PGBU Broward - Plant General Manager
Florida Power and Light Company



Cc: Scott Sheplak

State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Mail Station #5505
Tallahassee, FL 32399-2400

Tom Tittle

State of Florida
Department of Environmental Protection
Southeast Florida District
400 Congress Ave.
P.O.Box 15425
West Palm Beach, Fl. 33416

Daniela Banu

Broward County DNR
218 SW 1st Ave.
Ft Lauderdale, Fl. 33301

Attachments: 2

B.27. It is not necessary to plan the firing of a fuel solely to complete the initial compliance test, instead, the initial test may be postponed until such time as the untested fuel is ready for service. Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels. The stack test for each turbine shall be performed within 10% of the maximum heat rate input for the tested operating temperature. Annual (A) compliance tests shall be performed on each Combustion Turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A. (Note: based on information provided in the Title V Permit Application, initial testing using distillate oil has **not been done.**) See specific condition B.3 for utilization of ambient temperature versus heat input curves during compliance testing.

Pollutant	EPA Reference Method	Initial testing		Annual testing	
		Gas	Oil	Gas	Oil
Particulate Matter	5 or 17		X		X
Sulfuric Acid Mist	8		X		
Visible Emissions	9	X	X	X	X
Carbon Monoxide	10	X	X	X	X
Nitrogen Oxides	20	X	X	X	X
Volatile Organic Compounds	18	X	X		
	Test Method				
Lead	EMTIC Test Method, or Method 7090, or 7091*		X		
Beryllium	EMTIC Test Method, or Method 104, or Method 7090, or 7091*		X		
Sulfur content	ASTM D 2880-96		X		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92	X		X	
Mercury	40 CFR 61, Appendix B EPA Method 101	X	X		

*Method 3040 sample extraction shall be used as described in the EPA solid waste regulations SW 846.

[PSD-FL-146, Specific Condition No. 10; and, applicant request letter dated July 28, 1998]

A.17. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

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

A.18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

Test Methods and Procedures

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

A.19. Except as specified in this condition for visible emissions testing on fuel oil, annual compliance tests shall be performed on each combustion turbine unit with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A. The stack test for each turbine shall be performed according to the requirements of specific condition A.20.

Pollutant	EPA Reference Method	Gas	Oil
Particulate Matter	5 or 17		X
Visible Emissions	9	X	X
Carbon Monoxide	10	X	X
Nitrogen Oxides	20	X	X
Volatiles Organic Compounds	25A	X	X
	Test Method		
Sulfur content	ASTM D 2880-96*		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92*	X	

*or the latest edition.

DELETE

Table 2-1, Compliance Requirements

**Florida Power & Light Company
Lauderdale Plant**

**Permit No.: 0110037-001-AV
Facility ID No.: 0110037**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID Nos.		Brief Description		Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
Pollutant Name or Parameter	Fuel(s)	Compliance Method						
-035 -036 -037 -038		Combined-cycle Combustion Turbines with HRSGs						
VE	Oil Gas	EPA Method 9 EPA Method 9		Annual Annual	1-Oct 1-Oct	1 Hour 1 Hour		A.19 A.19
PM/PM10	Oil	EPA Method 5 or 17		Annual	1-Oct	3 Hours		A.19
SO2 (Sulfur Content of Fuel)	Oil Gas	ASTM D 2880-96 ASTM D 1072-90(94)E-1 or D 3031-81(86) or D 4084-94 or D 3246-92	Upon receipt of distillate oil	Annual	1-Oct			A.19 A.19
NOx	Oil Gas	EPA Method 20 EPA Method 20		Annual Annual	1-Oct 1-Oct		Yes Yes	A.19 A.19
VOC	Oil Gas	EPA Method 25A EPA Method 25A	INITIAL	Annual Annual	1-Oct 1-Oct			A.19 A.19
CO	Oil Gas	EPA Method 10 EPA Method 10		Annual Annual	1-Oct 1-Oct			A.19 A.19
CO2							Yes	

E.U. ID Nos.		Brief Description		Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
Pollutant Name or Parameter	Fuel(s)	Compliance Method						
-003 -015		Banks of 12 Combustion Turbines						
VE	Oil Gas	EPA Method 9 EPA Method 9		Annual Annual	1-Oct 1-Oct	1 Hour 1 Hour		B.15 B.15
NOx	Oil Gas	EPA Method 20 EPA Method 20		Annual Annual	1-Oct 1-Oct			B.16, B.17 B.16, B.17
VOC	Oil Gas	EPA Method 25A EPA Method 25A		5 years 5 years	1-Oct 1-Oct			B.18 B.18

Notes:
 *CMS [=] Continuous Monitoring System
 **Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

ATTACHMENT No. 3

Scott



RECEIVED

FEB 08 2000

January 27, 2000

BUREAU OF AIR REGULATION

Clair H. Fancy
Chief - Bureau of Air Regulation
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Mail Station #5505
Tallahassee, FL 32399-2400

**Re: Administrative Change of Title V Permit 0110037-001-AV
Lauderdale Power Plant, Combined Cycle Units, ID Numbers 035 - 038
Subtraction of Background VOC**

Dear Mr. Fancy:

On September 23, 1998 a number of issues regarding Title V permit consistency were discussed during a meeting in your offices between FDEP and FPL. Scott Sheplak, Tom Cascio of FDEP, Scott Busa, Vito Giarrusso, and Mary Archer of FPL covered a number of issues concerning potential administrative changes to FPL's Title V permits.

One issue involved FPL's Lauderdale Power Plant and testing of VOC. The Lauderdale permit does not allow for the subtraction of background VOC concentrations. This was overlooked in the permit review process. Other FPL permits allow for exclusion of the VOC background, such as the FPL Martin Plant.

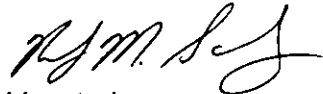
- FPL requests language to subtract the background VOC level from the test results, and that the Department consider a 5-year test frequency.
This is consistent with the Martin Plant Site Certification Permit PA 89-27, page B-9, which includes language that the emission limit for VOC is "*Exclusive of background concentrations.*" [Attachment No. 1].

FPL suggests the following footnote to the Lauderdale permit to address exclusion of background VOC:

- Page 11. Test Methods and Procedures, Specific condition A.19 Table - Add footnote: " **** Exclusive of background concentrations**", and place ****** next to VOC under the Pollutant column. [Marked up copy attached - Attachment No. 2].
- Table 2-1, Compliance Requirements - Add footnote: " ***** Exclusive of background concentrations**", and place ******* next to VOC under the Pollutant Name or Parameter column. In addition, FPL suggests that the Testing Time Frequency be changed to "5 Years" from "Annual". [Marked up copy attached - Attachment No. 3].

As discussed on September 23, we believe these to be administrative changes.

Thank you for your assistance in this matter, and, if you should have any questions, please do not hesitate to contact Kevin Washington at (561) 691-2877.

A handwritten signature in black ink, appearing to read 'Rudy Sanchez', written in a cursive style.

Very truly yours,

Rudy Sanchez
PGBU Broward - Plant General Manager
Florida Power and Light Company

Cc: Scott Sheplak - FDEP
Daniela Banu - Broward County DNRP

Attachments: 3

Pollutant	Fuel	Basis	Emission Limitations ^d			
			Units 3 & 4		Units 5 & 6	
			lb/hr/CT	TPY ^a	lb/hr/CT	TPY ^a
NOx	Gas	25 ppmvd @ 15% O ₂	177	comb. } 3108	177	comb. } 3108
	Oil	65 ppmvd @ 15% O ₂	461	tot. }	461	tot. }
	CG	42 ppmvd @ 15% O ₂	392		6868	392
VOC ^b	Gas	1.6 ppmvd	3	comb. } 57	3	comb. } 57
	Oil	6 ppmvd	11	tot. }	11	tot. }
	CG	9 ppmvd	21.4		375	21.4
CO	Gas	30 ppmvd	94.3	comb. } 871	94.3	comb. } 871
	Oil	33 ppmvd	105.8	tot. }	105.8	tot. }
	CG	33 ppmvd	134		2311	134
PM/PM ₁₀	Gas		18	comb. } 100	18	comb. } 100
	Oil		60.6	tot. }	60.6	tot. }
	CG		19		333	19
Pb	Gas		neg.	comb. } 0.015	neg.	comb. } 0.015
	Oil		0.015	tot. }	0.015	tot. }
	CG		0.3		5.3	0.3
SO ₂	Gas		91.5	comb. } 568	91.5	comb. } 568
	Oil ^c		920	tot. }	920	tot. }
	CG		834		14612	834

a Tons per year (TPY) emission limits listed for natural gas and oil combined apply as an emission cap based on limiting oil firing to an annual aggregate of 2,000 hours for the 4 CTs, with compliance to be demonstrated in annual operation reports.

b Exclusive of background concentrations.

c Sulfur dioxide emissions based on a maximum of 0.5 percent sulfur in oil for hourly emissions and an average sulfur content of 0.3 percent for annual emissions.

d These limitations for Units 5 and 6 and coal gasification shall not be binding for subsequent BACT determinations.

e → see modification PAB9-27A, August 1993

A.17. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

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

A.18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

Test Methods and Procedures

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

A.19. Except as specified in this condition for visible emissions testing on fuel oil, annual compliance tests shall be performed on each combustion turbine unit with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A. The stack test for each turbine shall be performed according to the requirements of specific condition A.20.

Pollutant	EPA Reference Method	Gas	Oil
Particulate Matter	5 or 17		X
Visible Emissions	9	X	X
Carbon Monoxide	10	X	X
Nitrogen Oxides	20	X	X
Volatile Organic Compounds **	25A	X	X
	Test Method		
Sulfur content	ASTM D 2880-96*		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92*	X	

*or the latest edition.

** EXCLUSIVE OF BACKGROUND CONCENTRATIONS

Table 2-1, Compliance Requirements

Florida Power & Light Company Lauderdale Plant			Permit No.: 0110037-001-AV Facility ID No.: 0110037						
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.									
E.U. ID Nos.		Brief Description			Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
Pollutant Name or Parameter	Fuel(s)	Compliance Method							
-035 -036 -037 -038		Combined-cycle Combustion Turbines with HRSGs							
VE	Oil Gas	EPA Method 9 EPA Method 9		Annual Annual	1-Oct 1-Oct	1 Hour 1 Hour		A.19 A.19	
PM/PM10	Oil	EPA Method 5 or 17		Annual	1-Oct	3 Hours		A.19	
SO2 (Sulfur Content of Fuel)	Oil Gas	ASTM D 2880-96 ASTM D 1072-90(94)E-1 or D 3031-81(86) or D 4084-94 or D 3246-92		Upon receipt of distillate oil Annual	1-Oct			A.19 A.19	
NOx	Oil Gas	EPA Method 20 EPA Method 20		Annual Annual	1-Oct 1-Oct		Yes Yes	A.19 A.19	
VOC ***	Oil Gas	EPA Method 25A EPA Method 25A		Annual Annual	1-Oct 1-Oct			A.19 A.19	
CO	Oil Gas	EPA Method 10 EPA Method 10		Annual Annual	1-Oct 1-Oct			A.19 A.19	
CO2							Yes		
E.U. ID Nos.		Brief Description			Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
Pollutant Name or Parameter	Fuel(s)	Compliance Method							
-003 -015		Banks of 12 Combustion Turbines							
VE	Oil Gas	EPA Method 9 EPA Method 9		Annual Annual	1-Oct 1-Oct	1 Hour 1 Hour		B.15 B.15	
NOx	Oil Gas	EPA Method 20 EPA Method 20		Annual Annual	1-Oct 1-Oct			B.16, B.17 B.16, B.17	
VOC	Oil Gas	EPA Method 25A EPA Method 25A		5 years 5 years	1-Oct 1-Oct			B.18 B.18	

Notes:

*CMS (=) Continuous Monitoring System

**Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

*** EXCLUSIVE OF BACKGROUND CONCENTRATIONS