



TAMPA ELECTRIC

April 30, 2004

Ms. Teresa Heron
Florida Department of
Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via FedEx 7901 3531 2794
Airbill No.

RECEIVED
MAY 03 2004
BUREAU OF AIR REGULATION

Re: Tampa Electric Company
J.H. Phillips Station
DRAFT Title V Air Operation Permit Renewal
Permit No. 0550018-003-AV

Dear Ms. Heron:

Tampa Electric Company (TEC) has received and reviewed the above referenced draft Title V Air Operation Permit and has several minor comments. TEC offers the following suggested revisions to the J.H. Phillips Station Title V Draft Permit. Additions are in bold font and are underlined and deletions have been struck through.

TEC Comment # 1 - Fuel Oil Consumption Rate

As previously mentioned in the March 5, 2004 letter submitted to the Florida Department of Environmental Protection (FDEP), TEC requests Condition A.2 be amended to delete the last sentence referring to the maximum fuel oil consumption limit. During each federal fiscal year (October 1 – September 30), a formal compliance test is conducted on both E.U. IDs 001 and 002 slow speed diesel generating units to demonstrate compliance for carbon monoxide, sulfur dioxide, and nitrogen oxide emission rates, as well as visible emissions. The compliance test is performed within 90-100 percent of the emissions unit's rated capacity to establish appropriate limits, according to 62-297.310(2), F.A.C. The permitted capacity of E.U. ID 001 and 002, according to Condition A.1, has a maximum operating heat input rate of 172 MMBtu/hr, while burning No.6 fuel oil. While conducting the compliance test within 90-100 percent of 172 MMBtu/hr, the units typically burn approximately 27 barrels/hr of No.6 fuel oil (approximately 9,329 lb/hr) and comply with the limits of all the pollutants being tested. These emission limits are based on 8,400 hours/year operating time and 172 MMBtu/hr. The emission limits and the heat input are not based on 9,199.5 pounds/hr. If compliance with the fuel oil consumption limit of 9,199.5 pounds/hr per engine were to be determined using the compliance test, Phillip Units 1 & 2 would not comply with the fuel oil consumption limit. The facility has been operating in compliance with all the conditions of the Title V Air Operation permit issued on June 24, 1999. In the March 5, 2004 letter, the information provided was based on actual operational data using total amount of fuel burned and hours of operation. TEC therefore requests the maximum fuel oil consumption limit be removed from the draft permit and Condition A.2 be modified as follows:

A.2. Methods of Operation - Fuels:

This facility is authorized to fire Number 6 fuel oil with a sulfur content of <=2.5% by weight in the diesel generating units. Maximum fuel oil consumption shall not exceed 9,199.5 pound per year per engine.

[Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit].

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TEC Comment # 2 – Administrative Amendment

TEC requests a note be added at the end of Conditions A.5 to A.12 and C.10 to indicate the INITIAL Title V Air Operation Permit issued on June 24, 1999 was Administratively Amended.

A.5. Nitrogen Oxides: Compliance with the nitrogen oxide (NO_x) emission standard shall be determined by stack tests. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 20 or 7E as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

A.6. Carbon Monoxide: Compliance with the carbon monoxide (CO) emission standard shall be determined by stack tests. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 10 as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

A.7. Volatile Organic Compounds: Compliance with the volatile organic compound (VOC) emission standard will be assumed provided the CO allowable emission rate is achieved; specific VOC compliance testing is not required.

[PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

A.8. Visible Emissions: Compliance with the visible emission (VE) standard shall be determined by visual observations tests. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 9 as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

A.9. Particulate Matter: Compliance with the particulate matter standard will be assumed if the VE emissions are below 10 % opacity. If the opacity determined by EPA Method 9 is greater than 10% then a particulate matter emissions test is required. The test shall be conducted in accordance with EPA Method 5 as published in 40 CFR-60, Appendix A, or State approved equivalent method. [PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

A.10. Sulfur Dioxide: Compliance with the sulfur dioxide emission standard may be calculated from analyses of sulfur in the fuel oil. Sulfur content in fuel shall not exceed 2.5% by weight. [PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

A.11. Operating Parameters: The following parameters are to be monitored on a daily basis. Appropriate records shall be maintained on site for Department Inspection:

- (a) Intake manifold temperature
- (b) Intake manifold pressure
- (c) Engine Speed
- (d) Diesel rack position (fuel flow)
- (e) Injector timing
- (f) Gross heat of combustion value and percent sulfur content by weight for each fresh supply of fuel added to the storage facilities. A monthly fuel oil composite sample shall be prepared from daily fuel oil samples.

[PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. (March 14, 2000 Administrative Amendment)]

C.10. Fuel Oil Analysis

C.10.1. Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference--see Sec. 60.17). Sec. 60.41c Definitions.

C.10.2. Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American

Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference--see Sec. 60.17).

C.10.3. The sulfur content of all fuel oils shall be determined by either ASTM Method D 129-91, or D 2622-94, or D 4294-90, or a comparable method approved by the Department.

[Rule 62-213.440(1)(b)1.b, F.A.C. (March 14, 2000 Administrative Amendment)]

TEC Comment # 3 – Visible Emission Limit

TEC requests the words "equal to or" be added to Condition A.9 for clarification.

A.9. Particulate Matter: Compliance with the particulate matter standard will be assumed if the VE emissions are equal to or below 10 % opacity. If the opacity determined by EPA Method 9 is greater than 10% then a particulate matter emissions test is required. The test shall be conducted in accordance with EPA Method 5 as published in 40 CFR-60, Appendix A, or State approved equivalent method.

[PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. (March 14, 2000 Administrative Amendment)]

TEC Comment # 4 – Table 1-1 Summary of Air Pollutant Standards and Terms

TEC request Table 1-1 Summary of Air Pollutant Standards and Terms be corrected for accuracy.

TEC Comment # 5 – Test Method

TEC request the test method 20 be deleted from Condition A.5.

A.5. Nitrogen Oxides: Compliance with the nitrogen oxide (NOx) emission standard shall be determined by stack tests. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method ~~20~~ 7E as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [PSD-FL-071; Construction permit Nos. AC28-7377 and AC28-7291 and Rule 62-212.410, F.A.C. **(March 14, 2000 Administrative Amendment)**]

TEC Comment # 6 – Formal Compliance Test

TEC requests the following verbiage be changed for accuracy, since sulfur dioxide is not tested out the stack, but by fuel analysis:

A.12. Frequency of Compliance Tests: Slow speed diesel unit number 1 and 2 shall be stack tested for visible emissions, carbon monoxide, ~~sulfur dioxide~~, and nitrogen oxide emissions **with sulfur dioxide tested by fuel analysis**. Each test shall be conducted annually during each federal fiscal year (October 1-September 30).

TEC appreciates the opportunity to provide this input. If you have any further questions or need additional clarification, please do not hesitate to call Raiza Calderon or me at (813) 228-4369.

Sincerely,



Laura R. Crouch
Manager - Air Programs
Environmental, Health, and Safety

EA/bmr/RC179

c: Mara G. Nasca, FDEP South District

Table 1 - 1, Summary of Air Pollutant Standards and Terms

Tampa Electric Company **Permit No.: 0550018-003-AV**
 J. H. Phillips Station **Facility ID No.: 0550018**

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

E.U. ID No. **Brief Description:**
 001& 002 19.580 MW Slow Speed Diesel Engine Generators (emissions limit below are for each unit)

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions		Regulatory Citation(s)	See Permit Conditions
			Standard(s)	lbs/hour	TPY	lbs/hour	TPY		
NO _x	Oil	8400	819 ppm @15% O ₂	261.572	914.5 2402	261.572	914.5 2402	BACT Dated 02/17/81	A.4.
CO	Oil	8400	0.575 lb/MMBtu	50.99	175.2 415.8	50.99	175.2 415.8	BACT Dated 02/17/81	A.4.
HC	Oil	8400	0.26 lb/MMBtu	22.6 45	79.2 189	22.6 45	79.2 189	BACT Dated 02/17/81	A.4.
PM	Oil	8400	0.1 lb/MMBtu	8.7 17	30.5 71.4	8.7 17	30.5 71.4	BACT Dated 02/17/81	A.4.
SO ₂	Oil	8400	2.5% S and 2.67 lb/MMBtu	236.5 460	828.7 1932	236.5 460	828.7 1932	BACT Dated 02/17/81	A.4.

Notes:

* The "Equivalent Emissions" listed are for informational purpose only.