

Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

May 5, 2004

Mr. Mark J. Hornick
General Manager, Sebring Power
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Re: Title V Air Operation Permit Renewal
PROPOSED Permit Project No.: 0550018-003-AV
J.H. Phillips Station

Dear Mr. Hornick:

One copy of the "PROPOSED PERMIT RENEWAL DETERMINATION" for the J.H. Phillips Station, located at 7301 Airport Road, Sebring, Florida, Highlands County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit renewal has become a PROPOSED permit renewal.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. The web site address is:

<http://www.dep.state.fl.us/air/permitting/airpermits>

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit renewal is made by the USEPA within 45 days, the PROPOSED permit renewal will become a FINAL permit renewal no later than 55 days after the date on which the PROPOSED permit renewal was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit renewal, the FINAL permit renewal will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn. If you have any questions, please contact Teresa Heron at 850/921-9529.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

Copy furnished to:
Mr. Richard Cantrell, SD
Mr. Ron Blackburn, SD
Mr. Thomas W. Davis
USEPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

Printed on recycled paper.

PROPOSED Permit Renewal Determination
Tampa Electric Company
J.H. Phillips Station
Title V Permit Renewal No. 0550018-003-AV

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" to the Tampa Electric Company for the for the J.H. Phillips Station , located at 7301 Airport Road, Sebring, Florida, Highlands County, was clerked on March 16, 2004. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was published in the The News-Sun on Friday April 2, 2004. The DRAFT Title V Air Operation Permit Renewal was available for public inspection at the Department's South District office in Fort Myers and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was received on April 9, 2004.

II. Public Comment(s).

No comments were received from the citizens, environmental groups, municipalities or other agencies.

III. Applicant's Comments

Comments were received by the applicant by electronic mail on April 30, 2004 and confirmed by a letter received on May 3, 2004. Certain comments were very minor. The key requests are proposed changes to certain permits conditions as follows:

A.2. Methods of Operation - Fuels:

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

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

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 ~~20-07~~ 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.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.

PROPOSED Permit Renewal Determination
Tampa Electric Company
J.H. Phillips Station
Title V Permit Renewal No. **0550018-003-AV**

[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.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).

IV. Department Response:

The Department agrees with the applicant's requested changes to conditions **A.5**, **A.9** and **A.12**. The request to remove the maximum fuel oil consumption limit (Specific Condition **A.2**) will not be implemented because this condition is an applicable requirement from a federally-issued and enforceable PSD permit (PSD-FL-071). A key objective of the Title V program is to identify and include all such enforceable requirements in a single document.

V. Conclusion.

The permitting authority hereby issues PROPOSED Permit Renewal No. **0550018-003-AV**, with the changes noted above.

STATEMENT OF BASIS

Tampa Electric Company
J.H. Phillips Station
Facility ID No.: 0550018
Highlands County

Title V Air Operation Permit Renewal
PROPOSED Permit Project No.: 0550018-003-AV

This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The subject of this permit is for the renewal of the initial Title V Air Operation Permit No. 0550018-001-AV, and the incorporation of an Administrative Correction, No. 0550018-002-AV, issued on March 15, 2000.

This facility consists of two 19.580 MW slow speed diesel engine generators (SSDEG) with unfired heat recovery steam generators. The heat recovery steam generators for both engines share a 3.6 MW common steam turbine generator. This facility also comprises an auxiliary 10.46 MMBtu/hour steam boiler, a recirculating cooling water system, fuel oil storage tanks, a 540 Kw emergency diesel generator and auxiliary support equipment. No air pollution controls are installed in these SSDEG emission units. Compliance Assurance Monitoring (CAM) does not apply because no air pollution controls are installed in these emission units.

The Administrative Correction No. 0550018-002-AV included minor changes (correction of permit tracking numbers) to Section III. Subsection A. Specific Conditions A.5, A.6, A.8, A.9, and A.10. It also added new Specific Conditions A.7., C.5 (now transferred to Subsection C and renumbered as C.10.) and missing information to Specific Condition A.11. as follows:

A.7. Volatile Organic Compounds (VOCs)

Compliance with volatile organic compound emission limits will be assumed provided the CO allowable emission rate is achieved; specific VOC compliance testing is not required.
[Construction permits No. AC28-7377 & No. AC28-7201, dated March 16, 1981.]

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 fuel storage facilities.

[Construction permits No. AC28-7377 & No. AC28-7201, dated March 16, 1981.]

C.5. Fuel Oil Analysis

C.5.1. 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.5.2. 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.5.3. Sulfur: 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.]

This current permit renewal, 0550018-003-AV, incorporates the above mentioned changes, renumbers and modifies the wording of those same conditions without changing the intent. It adds new Specific Condition A.12 to Section III, Subsection A and new Specific Condition No. B.6. to Section III, Subsection B, as follows:

A.12. Frequency of Compliance Tests: Slow speed diesel unit number 1 and 2 shall be stack tested for visible emissions, carbon monoxide, 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).

Units No.1 and 2 Required Testing

Nitrogen Oxides (NO_x) – Annually

Sulfur Dioxide (SO₂) – Annually ⁽¹⁾

Volatile Organic Compound (VOC) ⁽²⁾

Carbon Monoxide (CO) – Annually

Particulate Matter (PM/PM₁₀) ⁽³⁾

Visible Emissions (VE) – Annually

(1) Calculated from monthly fuel oil composite sample analyses.

(2) Only required if EPA Method 10 carbon monoxide test exceeds 99 lb/hr limit.

(3) Only required if EPA Method 9 visible emissions test exceeds 10 % opacity.

B.6. Frequency of Compliance Tests. This unit shall be tested for visible emissions. Each test shall be conducted annually during each federal fiscal year (October 1- September 30).

Steam Boiler Required Testing

Nitrogen Oxides (NO_x) – Recordkeeping (Common Condition C.1)

Sulfur Dioxide (SO₂) – Annually ⁽¹⁾ and Recordkeeping (Common Condition C.1)

Visible Emissions (VE) – Annually

(1) Calculated from monthly fuel oil composite samples analyses.

Also, this current permit renewal, 0550018-003-AV, modifies all Specific Conditions of Subsection C as follows:

Regulations

C.1. Applicability

C.1.1. Applicable Emission Limiting Standards or Other Requirements: Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C., or any other requirements under Federal, State, or local law. [Rule 62-210.300, and 62-4.070(3) F.A.C.]

C.1.2. Common Conditions Applicable Requirements: All emissions units at this facility are subject to all applicable requirements of this Subsection C. [Rule 62-4.070(3) F.A.C.]

Monitoring of Operations

C.2. Determination of Process Variables:

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

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

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

C.3. Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

C.3.1. Excess Emissions Allowed: Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

C.3.2. Excess Emissions Prohibited: 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.]

Test Methods and Compliance Procedures

C.4. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

C.5. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

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

C.6. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

C.7. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

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

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the

period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

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

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

C.8. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

C.9. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

a. Did not operate.

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

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

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

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead

compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

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

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

(c) *Waiver of Compliance Test Requirements.* If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.; PSD-FL-071; and, SIP approved]

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.]

Recordkeeping and Notification Requirements

C.11. Fuel Oil Recordkeeping: Tampa Electric Company shall maintain daily records, in a permanent form suitable for inspection, documenting the sulfur content of all fuels burned. A monthly fuel oil composite sample shall be prepared from daily fuel oil samples. The records shall contain, as a minimum, for each monthly composite sample day, the sulfur content of the

fuels, the amount of each fuel burned, Btu content, and density of the fuel. The records shall ~~contain~~ provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's South District office to determine whether the emissions were if the test was properly conducted and the test results properly computed. All recorded data shall be maintained on file for a period of 5 years. Quarterly reports shall be submitted for those quarters in which the facility is in service. The reports shall be sent to the Department's South District office within 30 days of the end of the quarter giving monthly summaries of the following data:

- a) Pounds of sulfur dioxide per million Btu of heat input based on a monthly average.
- b) The amount of each type of fuel burned for the reporting period.

[PSD-FL-071 and Rule 62-4.070(3) F.A.C., BACT dated February 17, 1981 and Applicant's request received December 26, 2003]

C.12. Test Report Notification.

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

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

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's South District office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department's South District or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
- Rules 62-213.440 and 62-297.310(8), F.A.C.]

C.13. Excess Emissions Notification: In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's South District office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department or its agent.
[Rule 62-210.700(6), F.A.C.]

Report Requirements

C.14. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

C.15. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

This permit renewal, 0550018,003-AV, also refers to original construction permit PSD-FL-071 issued by EPA on April 3, 1981, and adds two conditions in Section III, Subsection A (see Specific Conditions A.2 and A.3) that were left out during the initial issuance of the Title V permit. These additional conditions are referenced in the PSD-FL-071 as follows: *Specific Condition No.5:* Operation of each engine shall be limited to 8400 hours per year. *Specific Condition No.6:* Maximum oil consumption shall not exceed 9,199.5 pounds per hour per each engine.

Some permitting notes were also added to this permit renewal, 0550018-003-AV, under Specific Conditions A.1. and B.1. of Section III, Subsections A and B. The facility-wide conditions were updated to reflect current Title V format.

A NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR, Part 63 Subpart ZZZZ, was proposed by EPA on December 19, 2002 and signed as a final rule on February 26, 2004. It has not been promulgated yet. These emissions units (engines) are required to comply with all applicable requirements by the effective day of promulgation.

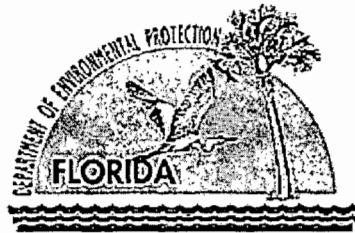
Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received on December 26, 2003, this facility is a major source of hazardous air pollutants (HAPs).

Note: Strikethrough text is deleted; underlined text is added.

Tampa Electric Company
J. H. Phillips Station
Facility ID No.: 0550018
Highlands County

Title V Air Operation Permit Renewal
PROPOSED Permit No.: 0550018-003-AV



Permitting Authority

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority

Department of Environmental Protection
South District
2295 Victoria Avenue
Fort Myers, Florida 33401
Telephone: 941/332-6975
Fax: 941/332-6969

Tampa Electric Company
J. H. Phillips Station
Facility ID No.: 0550018
Highlands County

Title V Air Operation Permit Renewal

PROPOSED Title V Air Operation Permit Renewal No.: 0550018-003-AV

Table of Contents

Section	Page Number
Placard Page	1
I. Facility Information	2-3
A. Facility Description.	
B. Summary of Emissions Unit ID Nos. and Brief Descriptions.	
C. Relevant Documents.	
II. Facility-wide Conditions	4-5
III. Emissions Unit(s) and Conditions	
A. 19.580 MW Slow Speed Diesel Engine Generator No. 1	7-9
19.580 MW Slow Speed Diesel Engine Generator No. 2	7-9
B. 10.46 MMBtu/hr Auxiliay Steam Boiler)	10-11
C. Common Conditions	12-17

Permittee:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601-0111
Renewal

PROPOSED Permit No.: 0550018-003-AV
Facility ID No.: 0550018
SIC Nos.: 4911
Project: PROPOSED Title V Air Operation Permit

This permit is for the operation of two 19.580 MW slow speed diesel engine generators and a 10.46 MMBtu/hr auxiliary steam boiler. The maximum heat input for each engine is 172 MMBtu/hour. The diesel engines burn No. 6 fuel oil. The boiler burns No. 2 fuel oil and the steam is used to heat the No. 6 fuel oil.

The facility is located at 7301 Airport Road, Sebring, Florida, Highlands County; UTM Coordinates: Zone 17, 464.30 km East and 3035.40 km North; Latitude: 27°26' 35" North and Longitude: 81°21'40" West.

This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix I-1: List of Insignificant Emissions Units and/or Activities

Appendix SS-1: Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-4, TITLE V CONDITIONS (version dated 02/12/02)

Figure 1: Summary Report –Gaseous and Opacity Excess Emissions and Monitoring System Performance (40 CFR).

Table 297.310-1: Calibration Schedule.

Effective Date: June 24, 2004

Renewal Application Due Date: December 24, 2008

Expiration Date: June 23, 2009

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Michael G. Cooke
Director of
Division of Air Resource Management

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two 19.580 MW slow speed diesel engine generators, two unfired heat recovery steam boilers, an auxiliary 10.46 MMBtu/hour steam boiler, a 3.6 MW steam turbine generator, and recirculating cooling water system, fuel oil storage tanks, a 540 Kw emergency diesel generator, and auxiliary support equipment.

Based on the initial Title V permit application renewal received December 26, 2003 this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U.

ID No.

Brief Description

001	19.580 MW Slow Speed Diesel Engine Generator
002	19.580 MW Slow Speed Diesel Engine Generator
004	10.46 MMBtu/hr Auxiliary Steam Boiler

The two slow speed diesel engines are fired with No. 6 fuel oil, and the auxiliary steam boiler is fired with No. 2 fuel oil. The emergency diesel generating unit operates less than 400 hours/year and qualifies as an insignificant activity pursuant to Rule 62-213.300 (2)(a)1., F.A.C.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit, however, are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

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

Table 2-1, Summary of Compliance Requirements

Statement of Basis

These documents are on file with permitting authority:

Initial Title V Permit Application received June 14, 1996 and all related documents (0550018-001-AV).

Administrative Correction Request received January 1, 2000 and all related documents (0550018-002-AV).

Renewal Title V Permit Application received on December 26, 2003 (mailed on December 23, 2003).

<u>E.U. ID No.</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>
001	19.580 MW Slow Speed Diesel Engine Generator	0550018-002-AV	3/15/00	3/15/05 Adm. Correction
		0550018-001-AV	06/24/99	06/24/04 Initial Title V
		AO28-234787	10/15/93	10/05/98
		AO28-154204	09/16/88	09/16/93
		AO28-71313	07/28/83	07/28/88
		PSD-FL-071	04/03/81	
002	19.580 MW Slow Speed Diesel Engine Generator	AC28-7377	0/316/81	03/16/83
		0550018-002-AV	3/15/00	3/15/05 Adm. Correction
		0550018-001-AV	06/24/99	06/24/04 Initial Title V
		AO28-234794	10/15/93	10/05/98
		AO28-154205	09/16/88	09/16/93
		AO28-71315	07/28/83	07/28/88
003	Emergency Diesel Generator (540 kw)	PSD-FL-071	04/03/81	
		AC28-7291	03/16/81	08/16/83
004	10.46 MM BTU/hr Auxiliary Steam Boiler	AO28-125884	05/14/87	05/14/92 Declared Exempt 3/3/92
		0550018-002-AV	3/15/00	3/15/05 Adm. Correction
		0550018-001-AV	06/24/99	06/24/04 Initial Title V
		AO28-234735	11/17/93	10/05/98
		AC28-221558	03/10/93	03/10/98

From: **Facility ID No.:** 52FTM280018

To: **Facility ID No.:** 0550018

Transfer: By letter dated March 7, 1991, Sebring Utilities Commission informed the Department that the PSD-FL-071 and its operating conditions were transferred to Tampa Electric Company pursuant to General Condition No. 7 of this permit.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV- 4, TITLE V CONDITIONS, (version dated 02/12/02) is a part of this permit. {Permitting note: APPENDIX TV- 4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

and,

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]

5. Insignificant Emissions Units and or Activities. Appendix I - List of insignificant emission units and/or activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430 (6) and 62-4.040 (1)(b), F.A.C.]

6. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic

compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting Note: No vapor emissions control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}

[Rule 62-296.320(1)(a), F.A.C.]

7. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS):

The following techniques will be used to prevent unconfined particulate matter emissions on as needed basis:

- a. Chemical or water application to:
 - Unpaved roads
 - Unpaved yard areas
- b. Paving and maintenance of roads, parking areas and yards.
- c. Landscaping or planting of vegetation.
- d. Confining abrasive blasting where possible.

[Rule 62-296.320(4)(c)2., F.A.C.; and, Requested by Applicant in application dated December 23, 2003]

8. Timely Recording, Monitoring and Reporting: When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

9. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

10. State Compliance Authority: The permittee shall submit all compliance related notifications and reports required of this permit to the Department's South District office:

Department of Environmental Protection
South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
Telephone: 941/332-6975
Fax: 941/332-6969

11. EPA Compliance Authority: Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155, Fax: 404/562-9164

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
001	19.580 MW Slow Speed Diesel Engine Generator
002	19.580 MW Slow Speed Diesel Engine Generator

The following specific conditions apply:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity: The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hour</u>	<u>Fuel Type</u>
001	172	No. 6 fuel oil
002	172	No. 6 fuel oil

{Permitting note: The above heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. Regular recordkeeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required, in order to demonstrate what percentage of the rated capacity that the unit was tested. Such heat input determinations may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heating value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test. }

Regulations: These emissions units are subject to applicable requirements of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. [Rule 62-210.300, and 62-4.070(3) F.A.C.]

A.2. Methods of Operation - Fuels:

This facility is authorized to fire Number 6 fuel oil with a sulfur content of $\leq 2.5\%$ by weight in the diesel generating units. Maximum fuel oil consumption shall not exceed 9,199.5 pound per hour per engine. [Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit].

A.3. Hours of Operation: These emissions units are allowed to operate 8400 hours/year. [Rules 62-4,160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

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

A.4. Allowable Limits: The allowable emissions for each slow-speed diesel engine generator shall not exceed:

Pollutant	Maximum Emissions	lb/hour	BACT basis
Nitrogen Oxides (NO _x)	819 PPM @ 15% O ₂	572	PSD-FL-071
Carbon Monoxide (CO)	0.575 lb/MMBtu	99	PSD-FL-071
Hydrocarbons (HC)	0.26 lb/MMBtu	45	PSD-FL-071
Particulate Matter (PM)	0.1 lb/MMBtu	17	PSD-FL-071
Sulfur Dioxide (SO ₂)	2.67 lb/MMBtu	460	PSD-FL-071

Test Methods and Procedures

{Permitting Note: Table 1-2, 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.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 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.]

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.]

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.]

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.]

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.]

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.]

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.]

A.12. Frequency of Compliance Tests: Slow speed diesel unit number 1 and 2 shall be stack tested for visible emissions, carbon monoxide, 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).

Units No.1 and 2 Required Testing

Nitrogen Oxides (NO_x) – Annually
Sulfur Dioxide (SO₂) – Annually ⁽¹⁾
Volatile Organic Compound (VOC) ⁽²⁾
Carbon Monoxide (CO) – Annually
Particulate Matter (PM/PM₁₀) ⁽³⁾
Visible Emissions (VE) – Annually

⁽¹⁾ Calculated from monthly fuel oil composite sample analyses.

⁽²⁾ Only required if EPA Method 10 carbon monoxide test exceeds 99 lb/hr limit.

⁽³⁾ Only required if EPA Method 9 visible emissions test exceeds 10 % opacity.

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emission unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
004	10.46 MMBtu/hr Auxiliary Steam Boiler

{Permitting note: The above heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. Regular recordkeeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required, in order to demonstrate what percentage of the rated capacity that the unit was tested. Such heat input determinations may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heating value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test. }

Regulations: This emissions unit is subject to applicable requirements of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. [Rule 62-210.300, and 62-4.070(3) F.A.C.]

The following specific conditions apply:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity: The maximum operation heat input rate shall not exceed 10.46 MMBtu/hour.
[Construction permit No. AC28-221558]

B.2. Methods of Operation - Fuel: This boiler is authorized to burn No. 2 fuel oil with a sulfur content $\leq 0.5\%$ by weight.
[Construction permit No. AC28-221558]

B.3. This emissions unit is allowed to operate 8400 hours/year.

Emission Limitations and Standards

{Permitting Note: Table 2-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

B.4. Visible Emissions (VE): Visible emissions shall not exceed 20% opacity under normal operation except for up to 6 minutes in any one hour during which the average opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

Test Methods and Procedures

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

B.5. Visible Emissions Compliance: Visible emissions tests are required to show continuing compliance with the visible emission standard for this unit. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Tests 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. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Rule 62-297.310(7), F.A.C.]

B.6. Frequency of Compliance Tests: This unit shall be tested for visible emissions. Each test shall be conducted annually during each federal fiscal year (October 1- September 30).

Steam Boiler Required Testing

Nitrogen Oxides (NO_x) – Recordkeeping (Common Condition C.1)

Sulfur Dioxide (SO₂) – Annually ⁽¹⁾ and Recordkeeping (Common Condition C.1)

Visible Emissions (VE) – Annually

⁽¹⁾ Calculated from monthly fuel oil composite samples analyses.

Section III. Emissions Unit(s) and Conditions.

Subsection C. Common Conditions. This section addresses the following emission unit(s)

E.U.

<u>ID No.</u>	<u>Brief Description</u>
001	19.580 MW Slow Speed Diesel Engine Generator
002	19.580 MW Slow Speed Diesel Engine Generator
004	10.46 MMBtu/hr Steam Boiler

Regulations

C.1. Applicability

C.1.1. Applicable Emission Limiting Standards or Other Requirements: Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C., or any other requirements under Federal, State, or local law. [Rule 62-210.300, and 62-4.070(3) F.A.C.]

C.1.2. Common Conditions Applicable Requirements: All emissions units at this facility are subject to all applicable requirements of this Subsection C. [Rule 62-4.070(3) F.A.C.]

Monitoring of Operations

C.2. Determination of Process Variables:

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

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

C.3. Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

C.3.1. Excess Emissions Allowed: Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

C.3.2. *Excess Emissions Prohibited:* 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.]

Test Methods and Compliance Procedures

C.4. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

C.5. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

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

C.6. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

C.7. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. ***Opacity Compliance Tests.*** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential

emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) *Minimum Sample Volume.* Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) *Required Flow Rate Range.* For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
- (e) *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

C.8. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

C.9. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) *General Compliance Testing.*

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to

Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate.

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

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

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

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

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

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

(c) *Waiver of Compliance Test Requirements*. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; PSD-FL-071; and, SIP approved]

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.]

Recordkeeping and Notification Requirements

C.11. Fuel Oil Recordkeeping: Tampa Electric Company shall maintain daily records, in a permanent form suitable for inspection, documenting the sulfur content of all fuels burned. A monthly fuel oil composite sample shall be prepared from daily fuel oil samples. The records shall contain, as a minimum, for each monthly composite sample, the sulfur content of the fuels, the amount of each fuel burned, Btu content, and density of the fuel. The records shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's South District office to determine if the test was properly conducted and the test results properly computed. All recorded data shall be maintained on file for a period of 5 years. Quarterly reports shall be submitted for those quarters in which the facility is in service. The reports shall be sent to the Department within 30 days of the end of the quarter giving monthly summaries of the following data:

- a) Pounds of sulfur dioxide per million Btu of heat input based on a monthly average.
- b) The amount of each type of fuel burned for the reporting period.

[PSD-FL-071 and Rule 62-4.070(3) F.A.C., BACT dated February 17, 1981 and applicant's request received December 26, 2003]

C.12. Test Report Notification.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's South District office on the results of each such test.
(b) The required test report shall be filed with the Department's South District office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's South District office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.

9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department's South District or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
[Rules 62-213.440 and 62-297.310(8), F.A.C.]

C.13. Excess Emissions Notification: In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's South District office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department or its agent.
[Rule 62-210.700(6), F.A.C.]

Report Requirements

C.14. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

C.15. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

Tampa Electric Company
J. H. Phillips Station

PROPOSED Permit No.: 0550018-003-AV

Appendix H-1, Permit History/ID Number Changes

Permit History (for tracking purposes):

<u>E.U. ID No.</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>
001	19.580 MW Slow Speed Diesel Engine Generator	0550018-002-AV	3/15/00	3/15/05 Adm. Correction
		0550018-001-AV	06/24/99	06/24/04 Initial Title V
		AO28-234787	10/15/93	10/05/98
		AO28-154204	09/16/88	09/16/93
		AO28-71313	07/28/83	07/28/88
		PSD-FL-071	04/03/81	
		AC28-7377	03/16/81	03/16/83
002	19.580 MW Slow Speed Diesel Engine Generator	0550018-002-AV	3/15/00	3/15/05 Adm. Correction
		0550018-001-AV	06/24/99	06/24/04 Initial Title V
		AO28-234794	10/15/93	10/05/98
		AO28-154205	09/16/88	09/16/93
		AO28-71315	07/28/83	07/28/88
		PSD-FL-071	04/03/81	
		AC28-7291	03/16/81	08/16/83
003	Emergency Diesel Generator (540 kw)	AO28-125884	05/14/87	05/14/92 Declared Exempt 3/3/92
004	10.46 MM BTU/hr Auxiliary Steam Boiler	0550018-002-AV	3/15/00	3/15/05 Adm. Correction
		0550018-001-AV	06/24/99	06/24/04 Initial Title V
		AO28-234735	11/17/93	10/05/98
		AC28-221558	03/10/93	03/10/98

From: **Facility ID No.:** 52FTM280018

To: **Facility ID No.:** 0550018

Transfer: By letter dated March 7, 1991, Sebring Utilities Commission informed the Department that the PSD-FL-071 and its operating conditions were transferred to Tampa Electric Company pursuant to General Condition No. 7 of this permit.

Notes:

- 1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 3/21/96.
- 2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96. {Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

<u>Emission Source</u>	<u>Process Area</u>
1. Emergency Diesel Generator (540 kw)	Facility-Wide
2. Fuel Oil Storage Tanks	Facility-Wide
3. Fresh Cooling Tower	Facility-Wide
4. Ancillary Support Equipment	Facility-Wide

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

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-003-AV
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

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	572	2402	572	2402	BACT Dated 02/17/81	A.4.
CO	Oil	8400	0.575 lb/MMBtu	99	415.8	99	415.8	BACT Dated 02/17/81	A.4.
HC	Oil	8400	0.26 lb/MMBtu	45	189	45	189	BACT Dated 02/17/81	A.4.
PM	Oil	8400	0.1 lb/MMBtu	17	71.4	17	71.4	BACT Dated 02/17/81	A.4.
SO ₂	Oil	84000	2.5% S and 2.67 lb/MMBtu	460	1932	460	1932	BACT Dated 02/17/81	A.4.

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

Table 1 - 2, Summary of Compliance Requirements

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-003-AV
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 Generator (each)

Pollutant Name or Parameter	Fuels	Compliance Method	Testing Time Frequency	Frequency Base Date*	Minimum Compliance Test Duration	CMS**	See Permit Condition(s)
NO _x	Oil	EPA Method 7 E	Once/Year	09/30/99	3 Hours		A.4., A.5., A.12., A.13.
CO	Oil	EPA Method 10	Once/Year	09/30/99	3 Hours		A.4., A.6., A.12., A.13.
HC	Oil	Record Keeping					A.4., A.7.
PM	Oil	VE	Once/Year	09/30/99	0.5 Hour		A.4., A.7, A.8., A.9. A.12., A.13.
SO ₂	Oil	Record Keeping (composite sample)					A.2., A.3., A.4., A.10., A.13.

Notes:
* The frequency base date is established for planning only; see Rule 62-297.310, F.A.C.
** CMS [=] continuous monitoring system

Table 2 - 1, Summary of Air Pollutant Standards and Terms

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-003-AV
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:**
004 10.46 MMBtu/hr Steam Boiler

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				1.5	6.3	Construction Permit Dated 03/10/93 Rule 62-296	B.1., B.2., B.3. B.4., B.5., C.9.(a)5.
SO ₂	Oil	8400	0.5% S	5.4	23	5.4	23		
PM	Oil	8400				0.2	0.8		

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

Table 2 - 2, Summary of Compliance Requirements

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-003-AV
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:**
004 10.46 Btu/hr Steam Boiler

Pollutant Name or Parameter	Fuels	Compliance Method	Testing Time Frequency	Frequency Base Date*	Minimum Compliance Test Duration	CMS**	See Permit Condition(s)
NO _x	Oil	Record Keeping					B.2., C.1.
SO ₂	Oil	Record Keeping					B.2., C.1.
PM	Oil	(composite sample) V.E.	Once/Year	09/30/99	1 Hour		B.4., B.5., C.9.(a) 5.

Notes:
 * The frequency base date is established for planning only; see Rule 62-297.310, F.A.C.
 ** CMS [=] continuous monitoring system