

## Memorandum

# Florida Department of Environmental Protection

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TO: Trina Vielhauer, Bureau of Air Regulation  
THROUGH: Jeff Koerner, Air Permitting North Section  
FROM: Jonathan Holtom, New Source Review Section JH  
DATE: May 19, 2008  
SUBJECT: Draft Air Permit No. 1050233-021-AC  
Tampa Electric Company, Polk Power Station  
85% Petroleum Coke / 15% Coal Blend Request

This project is subject to minor source preconstruction review. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- P.E. Certification.

The Draft Permit authorizes an increase in the petroleum coke to coal blend ratio that is allowed to be gasified at this facility from 60% / 40% to 85% / 15% and an increase in the allowable sulfur content of the blended fuel from 3.5% to 4.7% sulfur by weight. Minor changes and enhancements will also be made to components of the sulfuric acid plant and the acid gas removal system which will result in an increase in the allowable production of sulfuric acid from 77,640 tons per year to 299 tons per day (109,135 tons per year). The resulting syngas will continue to be fired in the existing integrated gasification combined cycle (IGCC) system. The proposed work will be conducted at the Polk Power Station, which is located in Polk County, Florida. The Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project. I recommend your approval of the attached Draft Permit.

Attachments

**P.E. CERTIFICATION STATEMENT**

**PERMITTEE**

Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601

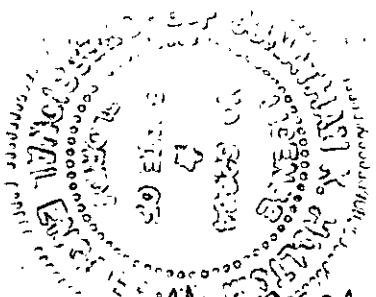
Air Permit No. 1050233-021-AC / PSD-FL-194H  
Polk Power Station  
Facility ID No. 1050233  
Polk, Florida

*Authorized Representative:*  
Mark J. Hornick, General Manager

**PROJECT DESCRIPTION**

For the IGCC unit, based on the results of the trial burns authorized by permit project number 1050233-019-AC, the applicant is requesting permanent authority to produce and fire syngas from a blend of coal/petroleum coke with up to 85% petroleum coke and a maximum sulfur content of up to 4.7% by weight. The higher sulfur content of the gasified fuel stock leads to a greater recovery of saleable sulfuric acid. To accommodate the increase in sulfuric acid recovery, minor modifications will be required for the sulfuric acid plant and the methyl diethanol amine (MDEA) acid gas removal system in order to provide additional control stability. In addition, the applicant has requested an increase in the sulfuric acid production rate to allow the production of up to 299 tons per day of 100% sulfuric acid.

*I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).*



Jonathan Holtom  
Jonathan Holtom, P.E.  
Registration Number: 52664

5/15/08  
(Date)



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

May 22, 2008

*{Sent by Electronic Mail – Received Receipt Requested}*

Mr. Mark J. Hornick, General Manager  
Tampa Electric Company  
Polk Power Station  
P.O. Box 111  
Tampa, FL 33601

Re: Draft Permit No. 1050233-021-AC / PSD-FL-194H  
Tampa Electric Company – Polk Power Station  
85% Petroleum Coke / 15% Coal Blend Project

Dear Mr. Hornick:

On November 16, 2007, the Department received your request to gasify and fire coal/petroleum coke blends with up to 85% petroleum coke in the existing integrated gasification combined cycle system at the Polk Power Station. Based on your requests and additional information provided, the Department gives notice of its intent to issue the attached air permit. The permit package includes the following documents: Technical Evaluation and Preliminary Determination, Draft Permit, Written Notice of Intent to Issue Air Permit, and Public Notice of Intent to Issue Air Permit.

The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jonathan Holtom, at 850/921-9531.

Sincerely,

Trina Vielhauer, Chief  
Bureau of Air Regulation

Enclosures

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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*In the Matter of an Application for Air Permit by:*

Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601

*Authorized Representative:*

Mark J. Hornick, General Manager

Air Permit No. 1050233-021-AC / PSD-FL-194H  
Facility ID No. 1050233  
Polk Power Station, IGCC System  
85% Petroleum Coke / 15% Coal Blend Project  
Polk County, Florida

**Facility Location:** The Tampa Electric Company operates the Polk Power Station, which is located at 9995 State Route 37 South in Polk County, Florida.

**Project:** The applicant requests authority to gasify a coal/petroleum coke blend with up to 85% petroleum coke with a maximum content of 4.7% sulfur, by weight. The resulting syngas will be fired in the existing integrated gasification combined cycle (IGCC) system. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

**Mediation:** Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief  
Bureau of Air Regulation

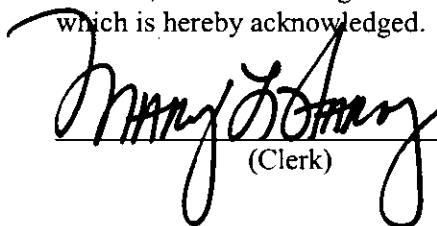
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by electronic mail with received receipt requested before the close of business on 5/22/08 to the persons listed below.

- Mr. Mark Hornick, TECO ([MJHORNICK@TECOENERGY.COM](mailto:MJHORNICK@TECOENERGY.COM))
- Mr. Joshua Ellwein, P.E., TECO ([JDELLWEIN@TECOENERGY.COM](mailto:JDELLWEIN@TECOENERGY.COM))
- Mr. Byron Burrows, TECO ([BTBURROWS@TECOENERGY.COM](mailto:BTBURROWS@TECOENERGY.COM))
- Ms. Mara Nasca, SWD Office ([MARA.NASCA@DEP.STATE.FL.US](mailto:MARA.NASCA@DEP.STATE.FL.US))
- Mr. Gregg Worley, EPA Region 4 ([WORLEY.GREGG@EPAMAIL.EPA.GOV](mailto:WORLEY.GREGG@EPAMAIL.EPA.GOV))
- Ms. Katy Forney, EPA Region 4 ([FORNEY.KATHLEEN@EPA.GOV](mailto:FORNEY.KATHLEEN@EPA.GOV))

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

5/22/08  
(Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection  
Draft Air Permit No. 1050233-021-AC / PSD-FL-194H  
Tampa Electric Company – Polk Power Station  
Polk County, Florida

**Applicant:** The applicant for this project is the Tampa Electric Company. The applicant's authorized representative is Mark Hornick, General Manager – Polk Power Station. The mailing address is P.O. Box 111, Tampa, FL 33601.

**Facility Location:** The Tampa Electric Company operates Polk Power Station, which is located at 9995 State Route 37 South, in Polk County Florida.

**Project:** The Polk Power Station operates an existing integrated gasification combined cycle (IGCC) system consisting of a combined cycle combustion turbine, a solid fuel handling system, a solid fuel gasification plant, and a sulfuric acid plant. Currently, the IGCC system fires syngas in the combined cycle combustion turbine produced from gasifying a blend of coal/petroleum coke with up to 60% petroleum coke and a maximum sulfur content of 3.5% by weight. The applicant proposes to gasify petroleum coke/coal blends of up to 85% petroleum coke with a maximum sulfur content of 4.7% by weight. Aside from the higher sulfur content of the increased fuel blend authorized by this permit, the plant must comply with all other existing permit restrictions. Emissions are not expected to increase in amounts that would result in PSD-significant emissions increases. Therefore, the project is not subject to PSD preconstruction review. Emissions will be monitored by conducting stack tests and collecting continuous emissions monitoring data on a regular basis to determine any changes in emissions.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

**Notice of Intent to Issue Air Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments

(Public Notice to be Published in the Newspaper)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available for this proceeding.

**(Public Notice to be Published in the Newspaper)**



**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**APPLICANT**

Tampa Electric Company  
Polk Power Station  
ARMS Facility ID No. 1050233

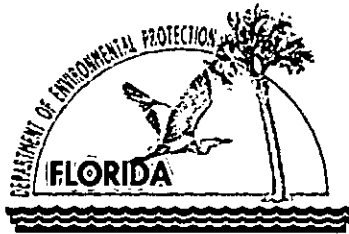
Polk County, Florida

**PROJECT**

Draft Permit No. 1050233-021-AC  
85% Petroleum Coke / 15% Coal Blend Request  
Integrated Gasification Combined Cycle (IGCC) Unit

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
New Source Review Section



May 22, 2008

*{Filename: 1050233-021-AC TEPD}*

## 1. GENERAL PROJECT INFORMATION

### Facility Description and Location

The Polk Power Station is an existing electrical generating plant (SIC No. 4911) located at 9995 State Route 37 South in Polk County, Florida. The UTM coordinates are Zone 17, 402.45 km East, and 3067.35 km North. The power plant consists of the following equipment: a nominal 260 megawatt (MW) combined cycle combustion turbine, a solid fuel handling system, a solid fuel gasification plant, a sulfuric acid plant, an auxiliary boiler, and four nominal 165 MW simple cycle gas turbines. The combined cycle combustion turbine, solid fuel handling system, solid fuel gasification plant, and sulfuric acid plant form an integrated gasification combined cycle (IGCC) system. Currently, the IGCC system fires synthesis gas (syngas) in the combined cycle combustion turbine produced from gasifying a blend of coal/petroleum coke with up to 60% petroleum coke and a maximum sulfur content of 3.5% by weight. The gasification process and acid clean-up operations currently result in the allowable production of up to 77,640 tons of 100% sulfuric acid annually.

### Regulatory Categories

Title III: The existing facility is not a major source of hazardous air pollutants (HAP).

Title IV: The existing facility has units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.).

PSD: The existing facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of air quality.

NSPS: The existing facility operates units subject to the New Source Performance Standards in Part 60, Title 40 of the Code of Federal Regulations (CFR).

### Project Description

For the IGCC unit, based on the results of the trial burns authorized by permit project number 1050233-019-AC, the applicant is requesting permanent authority to produce and fire syngas from a blend of coal/petroleum coke with up to 85% petroleum coke and a maximum sulfur content of up to 4.7% by weight. The higher sulfur content of the gasified fuel stock leads to a greater recovery of saleable sulfuric acid. To accommodate the increase in sulfuric acid recovery, minor modifications will be required for the sulfuric acid plant and the methyl diethanol amine (MDEA) acid gas removal system in order to provide additional control stability. In addition, the applicant has requested an increase in the sulfuric acid production rate to allow the production of up to 299 tons per day of 100% sulfuric acid.

### Processing Schedule

11/16/07 Received application for a minor source air pollution construction permit.

12/14/07 Requested additional information.

03/06/08 Received additional information.

## 2. APPLICABLE REGULATIONS

### State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.), which authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code. This project is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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(Preconstruction Review, Preconstruction Review for the Prevention of Significant Deterioration of Air Quality, and Preconstruction Review for Nonattainment Areas); 62-213 (Title V Air Operation Permits for Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures). The PSD applicability of Rule 62-212.400, F.A.C. is discussed in Section 2 of this report. The combustion turbine is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT) Determination, dated February 24, 1994.

### Federal Regulations

The Environmental Protection Agency establishes air quality regulations in Title 40 of the Code of Federal Regulations. Part 60 identifies New Source Performance Standards (NSPS) for a variety of industrial activities. Part 61 specifies National Emissions Standards for Hazardous Air Pollutant (NESHAP) based on specific pollutants. Part 63 specifies NESHAP provisions based on the Maximum Achievable Control Technology (MACT) for given source categories. Federal regulations are adopted in Rule 62-204.800, F.A.C. The combustion turbine is regulated under Acid Rain, Phase II; New Source Performance Standards - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.

### PSD Applicability - General

The Department regulates major stationary sources in accordance with Florida's PSD program, as defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal ambient air quality standards or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant, or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD major facility categories, or 5 tons per year of lead.

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the significant emission rates specified in Rule 62-210.200 (Definitions), F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

### PSD Applicability - Project

The Polk Power Station is an existing PSD-major facility located in Polk County, which is an area that is currently in attainment with, or designated as unclassifiable for, each pollutant with a state or federal Ambient Air Quality Standard (AAQS). The applicant states that the project will not result in any significant increases in emissions from carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM/PM<sub>10</sub>), sulfuric acid mist (SAM), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC) or any trace metals. No changes are proposed for the Unit 1 gasification or combustion turbine other than the use of 85 percent petcoke. Since the IGCC system currently produces a syngas from petcoke/coal blends, no actual emissions increases of non-sulfur combustion byproducts (i.e., NO<sub>x</sub>, CO and VOC) are expected. The ash content of petcoke is significantly lower than coal; approximately 0.5 weight percent for petcoke compared to 9 percent for coal. With higher concentrations of petcoke there will be a proportionate amount of lower ash content loading, thus allowing the PM removal processes to perform more efficiently. Therefore, increases in actual PM/PM<sub>10</sub> emissions will not occur due to the gasification of 85 percent petcoke. Similarly, increases in actual emissions of lead (Pb) will not occur since the lead content of petcoke is approximately one order of magnitude lower than coal. The applicant's PSD applicability analysis therefore primarily focused on the two pollutants, SO<sub>2</sub> and sulfuric acid mist (SAM), that have the potential to increase due to the higher sulfur content of petcoke.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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When the sulfur content and other quality parameters of the gasifier's solid fuel are within the capability envelope of the acid gas removal systems (carbonyl sulfide (COS) hydrolysis and MDEA acid gas removal) as they were during the trial burn test program, operating conditions of those units are adjusted to compensate for process variations (input sulfur, ambient temperature, etc.) and to ensure that SO<sub>2</sub> emissions from the combustion turbine remain below permitted levels according to the Part 75 Acid Rain continuous emissions monitoring system (CEMS). The MDEA acid gas removal system removes 97-98% of the hydrogen sulfide (H<sub>2</sub>S) from the raw syngas. From the H<sub>2</sub>S removed and sent to the sulfuric acid plant, over 99.5% is recovered into sulfuric acid. Given the extremely high level of sulfur removal that these systems provide, it is expected that small gains in removal efficiency can outweigh increases in the sulfur content of the feedstock. Based on the information available and a review of the data acquired during the test burn trials, the indications are that SAM emissions from the combustion turbine stack are directly related to SO<sub>2</sub> emissions (SAM ~ 0.05 x SO<sub>2</sub> on a molar basis). Due to the capabilities of the sulfur removal systems to produce larger quantities of sulfuric acid when the sulfur content of the raw fuel is increased, neither SO<sub>2</sub> nor SAM emissions from the combustion turbine stack are expected to increase in a significant amount.

During the test program, the sulfuric acid plant demonstrated its ability to accommodate feedstocks with sulfur content up to 4.7%, by weight, without any significant increases in SO<sub>2</sub> and SAM emissions from either the combustion turbine stack or the sulfuric acid plant stack. However, many of the controllers had to be operated at 100% output most of the time during the test program to accomplish this. Polk Power Station plans to make the following modifications to the sulfuric acid plant for improved operability on the higher sulfur fuels so the controllers can operate in their normal control range. Similar modifications to the MDEA acid gas removal system are also planned and are identified below.

### Sulfuric Acid Plant Modifications

1. During the trial test burns the sulfuric acid plant compressor had to be operated very near 100% output to keep the sulfuric acid plant pressure profile within design limits. Although operating the sulfuric acid plant compressor as such was sufficient for all trial burn scenarios, it is not a desirable long-term operating condition. Consequently re-engineering of the compressor motor, and/or gear box, and/or impellor blades will be done to provide the machine with enough incremental capacity to return the machine's controls to a normal operating range while still controlling plant pressure and sulfuric acid production (70% or 80% output vs. the 100% output during the test burns). The re-engineering is not designed to increase the flow rate through the acid plant above its current capacity, which was adequate during the fuel trial burns, but rather it is to provide control stability for the compressor so it can better accommodate minor process disturbances. This can most effectively be done by one of the following options:
  - Changing the compressor gear box ratio.
  - Increasing the compressor wheel size.
  - Installing a booster compressor.
  - Installing a parallel compressor.
  - Installing an oxygen injection quill in the decomposition furnace air inlet duct.
  - Changing the compressor motor size.
2. Additional air supply from the plant air system was required for the sulfuric acid plant decomposition furnace during the trial burns to accommodate the increased solid fuel sulfur content. The external air source was needed during the tests because a flow restriction exists in the normal air supply to the furnace's burner. Although burner modifications were made between Trial Burns #1 and #2 and between Trial Burns #2 and #4, this problem was not completely resolved. The decomposition furnace air intake system will be modified to decrease the pressure drop by one of the following options:
  - Modifying the existing burner.
  - Replacing the existing burner.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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- Modifying the air inlet duct.
- Installing an oxygen injection quill air inlet duct.

As with the compressor modifications, the design objective for the decomposition furnace air intake modifications is not to increase the flow rate beyond that which was demonstrated during the trial burn tests. It is merely to enable the normal air supply system to provide the necessary air while keeping the inlet airflow controls in their normal range to better accommodate minor process disturbances.

3. The decomposition furnace produces  $\text{SO}_2$ . Oxygen ( $\text{O}_2$ ) must be added upstream of the catalyst beds to permit conversion of the  $\text{SO}_2$  to sulfur trioxide ( $\text{SO}_3$ ). The  $\text{O}_2$  supply line and/or control valve restricted flow such that the control valve operated 100% open during most of the testing. Modifying the line and/or control valve to increase the  $\text{O}_2$  supply by approximately 15% will ensure sufficient  $\text{O}_2$  will be supplied while keeping the control valve in a normal operating range to accommodate minor process upsets. Here, again, the design intent is not to provide additional  $\text{O}_2$  beyond that which was used during the test, but to provide control stability. This may be accomplished by the following:
  - Modifying the  $\text{O}_2$  piping to reduce the pressure drop.
  - Increasing the size of the  $\text{O}_2$  control valve.

### MDEA Acid Gas Removal System Modifications

1. Lowering the temperature or "chilling" the MDEA sulfur removal solvent increases its sulfur removal rate. The MDEA chiller was operated throughout the trial burns to assure adequate sulfur removal. However, the trial burns were conducted during December, January, and March when the solvent was already relatively cool. The plan is to approximately double the chilling capacity for the MDEA solvent to assure adequate sulfur removal from the syngas during warmer ambient temperature seasons. This will likely be accomplished by adding an additional chiller system.
2. During normal plant operating conditions MDEA foaming occurs to some extent. If the foaming becomes severe, it can reduce hydrogen sulfide ( $\text{H}_2\text{S}$ ) removal efficiency and can also lead to dilute acid gas (lower than design  $\text{H}_2\text{S}$  concentration) which has an adverse impact on the sulfuric acid plant performance. During the trial burns with increased solid fuel sulfur content, a standard commercial foam-inhibiting additive was continuously injected, but the ion exchange system for heat stable salt removal was shut down due to the adverse affect the additive has on the ion exchange resin. Long-term operation of the MDEA system is not possible without the ion exchange system. Equipment and provisions will be installed for a more consistent foam-inhibiting additive system to the circulating MDEA solvent. This will be accomplished by either adding another carbon filter bed upstream of the heat stable salt removal system or by rerouting the piping so the existing carbon filter will be positioned immediately upstream of the heat stable salt removal system. This will enable a replacement of the current batch anti-foam feeding system with a continuous very low rate anti-foam feeding system that can better control the foaming tendencies of the MDEA solvent.
3. The first MDEA chiller system added to the plant several years ago included a heat exchanger which imposed additional pressure drop on the main MDEA flow path. As a result, one of the MDEA control valves had less available pressure drop, and consequently was undersized for the application. The control valve will be replaced with one which can perform within the normal control range with the available pressure drop.

Aside from the higher blended fuel sulfur contents, the project must comply with the existing requirements of the Title V air operation permit. The primary concern is for SAM and  $\text{SO}_2$  emissions, due to the higher sulfur content of the petroleum coke that will be gasified and fired in the future. Currently, the existing sulfuric acid plant is permitted to produce 77,640 tons/year of 100% sulfuric acid. With the increased sulfur in the fuel and the increased sulfur removal efficiency resulting from the changes outlined above, the annual sulfuric acid production capacity will likely increase. TECO is proposing a new production limit of up to 299 tons per day of 100% acid to provide the ability to scrub as much sulfuric acid as possible out of the syngas prior to its

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The Department makes a preliminary determination that the proposed, project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jonathan Holtom is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

# ***(DRAFT)***

## **PERMITTEE:**

Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601

*Authorized Representative:*  
Mark J. Hornick, General Manager

Air Permit No. 1050233-021-AC / PSD-FL-194H Polk Power Station Facility ID No. 1050233 SIC No. 4911 Permit Expires: June 1, 2009
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## **PROJECT AND LOCATION**

This permit authorizes an increase in the petroleum coke to coal blend ratio that is allowed to be gasified at this facility from 60% / 40% to 85% / 15% and an increase in the allowable sulfur content of the blended fuel from 3.5% to 4.7% sulfur by weight. In order to better accommodate this change in fuel ratio, minor changes and enhancements will also be made to components of the sulfuric acid plant and the acid gas removal system which will result in an increase in the allowable production of sulfuric acid from 77,640 tons per year to 299 tons per day (109,135 tons per year). The resulting syngas will continue to be fired in the existing integrated gasification combined cycle (IGCC) system at the Polk Power Station, which is located at 9995 State Route 37 South in Polk County, Florida.

## **STATEMENT OF BASIS**

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Part 60 of the Code of Federal Regulations. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

## **CONTENTS**

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

*(DRAFT)*

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Joeseeph Kahn, Director  
Division of Air Resource Management

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(Date)

## SECTION 1. GENERAL REQUIREMENTS (DRAFT)

### FACILITY AND PROJECT DESCRIPTION

The Polk Power Station is an existing electrical generating plant consisting of the following equipment: a nominal 260 megawatt (MW) combined cycle combustion turbine (Unit 1), a solid fuel handling system, a solid fuel gasification plant, a sulfuric acid plant, an auxiliary boiler, and two nominal 165 MW simple cycle gas turbines (Units 2 and 3). Two additional nominal 165 MW simple cycle gas turbines (Units 4 and 5) have been permitted, but are not yet in operation. The combined cycle combustion turbine, solid fuel handling system, solid fuel gasification plant, and sulfuric acid plant form an integrated gasification combined cycle (IGCC) system. Currently, the IGCC system fires synthesis gas (syngas) in the combined cycle combustion turbine produced from gasifying a blend of coal/petroleum coke with up to 60% petroleum coke and a maximum sulfur content of 3.5% by weight.

This permit authorizes an increase of the blend ratio of petroleum coke/coal that can be gasified to an allowable ratio of 85% petroleum coke to 15% coal, with a new maximum sulfur content of up to 4.7% by weight. The resulting syngas will continue to be fired in the existing combustion turbine. This permit also recognizes and authorizes the minor upgrades and/or additions of component equipment at the sulfuric acid plant and the methyl diethanol amine (MDEA) acid gas removal plant that are outlined in the technical evaluation, along with an increase in the allowable sulfuric acid production rate of up to 299 tons per day of 100% sulfuric acid. This permit does not authorize any other increases in the allowable permitted capacities or pollutant emissions limits for any of the permitted emissions units. Except for the conditions listed below, the plant must continue to comply with all other existing permit restrictions. The following existing emissions units are affected by this project.

ID	Emission Unit Description
001	Unit 1 - Integrated gasification combined cycle (IGCC) combustion turbine rated at 260 MW
004	Sulfuric Acid Plant
005	Solid Fuel Handling System
006	Solid Fuel Gasification Plant

### REGULATORY CLASSIFICATION

Title III: The existing facility is not a major source of hazardous air pollutants (HAP).

Title IV: The existing facility has units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.).

PSD: The existing facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of air quality.

NSPS: The existing facility operates units subject to the New Source Performance Standards in Part 60, Title 40 of the Code of Federal Regulations (CFR).



## SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

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1. Permitting Authority: The Bureau of Air Regulation of the Florida Department of Environmental Protection is the Permitting Authority for this facility. The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southwest District Office at 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926.
3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Format); Appendix B (General Conditions); and, Appendix C (Common Conditions).
4. Source Obligation:
  - a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
  - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Part 60 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit (revision) at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

#### A. Combustion Turbine Unit 1, Sulfuric Acid Plant, and Solid Fuel Gasification Plant

12. SAM Emissions Monitor Report: Prior to the expiration date of this permit, the permittee shall submit a report detailing the potential options for continuous SAM emissions monitoring. Upon installation of an approved SAM CEMS or other approved monitoring protocol, the semi-annual SAM compliance tests required in Specific Condition 7 may be discontinued. [Rule 62-4.070(3), F.A.C. and Applicant Request]
13. Stack Test Reports: The permittee shall prepare and submit stack test reports within 45 days of completing the required emissions tests. All reports shall be submitted to the Compliance Authority. Initial stack test reports shall also be submitted to the Permitting Authority. [Rule 62-297.310(8), F.A.C.]
14. PSD Applicability Monitoring and Reporting Requirements:
- The permittee shall monitor the emissions of SO<sub>2</sub> and SAM; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, beginning with the first full calendar year following the year in which the change occurred. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.
  - The permittee shall report to the Department within 60 days after the end of each year during which records must be generated under subparagraph 62-212.300(1)(e)1., F.A.C., setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
    - The name, address and telephone number of the owner or operator of the major stationary source;
    - The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
    - If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and,
    - Any other information that the owner or operator wishes to include in the report.
  - The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1. and 2., F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

[Rule 62-212.300(1)(e), F.A.C.]

15. Computation of Emissions: The owner or operator shall compute emissions in accordance with the requirements set forth below:
- Basic Approach.** The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
    - If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
    - If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

#### A. Combustion Turbine Unit 1, Sulfuric Acid Plant, and Solid Fuel Gasification Plant

of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

3. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

#### b. Continuous Emissions Monitoring System (CEMS).

1. An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
  - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
  - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
2. Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
  - (a) A calibrated flowmeter that records data on a continuous basis, if available; or
  - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
3. The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other 63 necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

#### c. Mass Balance Calculations.

1. An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
  - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
  - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
2. Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
3. In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories,

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT).

#### A. Combustion Turbine Unit 1, Sulfuric Acid Plant, and Solid Fuel Gasification Plant

the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

d. Emission Factors.

1. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
    - a. If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
    - b. Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
    - c. The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
  2. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- e. Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- f. Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- g. Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- h. Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

**SECTION 4. APPENDICES (DRAFT)**

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**CONTENTS**

- Appendix A. Citation Formats
- Appendix B. General Conditions
- Appendix C. Common Conditions

**SECTION 4. APPENDIX A (DRAFT)**

**CITATION FORMATS**

*The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.*

**REFERENCES TO PREVIOUS PERMITTING ACTIONS**

Old Permit Numbers

*Example:* Permit No. AC50-123456 or Air Permit No. AO50-123456

*Where:* “AC” identifies the permit as an Air Construction Permit

“AO” identifies the permit as an Air Operation Permit

“123456” identifies the specific permit project number

New Permit Numbers

*Example:* Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

*Where:* “099” represents the specific county ID number in which the project is located

“2222” represents the specific facility ID number

“001” identifies the specific permit project

“AC” identifies the permit as an air construction permit

“AF” identifies the permit as a minor federally enforceable state operation permit

“AO” identifies the permit as a minor source air operation permit

“AV” identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

*Example:* Permit No. PSD-FL-317

*Where:* “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality

“FL” means that the permit was issued by the State of Florida

“317” identifies the specific permit project

**RULE CITATION FORMATS**

Florida Administrative Code (F.A.C.)

*Example:* [Rule 62-213.205, F.A.C.]

*Means:* Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

**SECTION 4. APPENDIX B (DRAFT)**

**GENERAL CONDITIONS**

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

**SECTION 4. APPENDIX B (DRAFT)**

**GENERAL CONDITIONS**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (Not Applicable);
  - b. Determination of Prevention of Significant Deterioration (Not Applicable); and
  - c. Compliance with New Source Performance Standards (Not Applicable).
14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



**SECTION 4. APPENDIX C (DRAFT)**

**COMMON CONDITIONS**

Unless otherwise specified in applicable permits, the following conditions apply to all emissions units and activities at the facility.

**EMISSIONS AND CONTROLS**

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

**TESTING REQUIREMENTS**

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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
5. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the 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. [Rule 62-297.310(2), F.A.C.]
6. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
7. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
  - a. Required Sampling Time. 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. The minimum observation

SECTION 4. APPENDIX C (DRAFT)

COMMON CONDITIONS

period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

- b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

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

8. 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.]

9. Sampling Facilities: Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E. For purposes of the temporary trial burn, the permittee may install temporary stack sampling facilities in accordance with Rule 62-297.310(6), F.A.C. [Rule 62-297.310(6), F.A.C.]

10. Test Notification: The owner or operator shall notify the Department, 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. [Rule 62-297.310(7)(a)9, F.A.C.]

11. Special Compliance Tests: When the Department, 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 shall 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. [Rule 62-297.310(7)(b), F.A.C.]

12. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department 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.

SECTION 4. APPENDIX C (DRAFT)

COMMON CONDITIONS

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 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.

[Rule 62-297.310(8), F.A.C.]

**RECORDS AND REPORTS**

13. **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.]
14. **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.]

**Harvey, Mary**

**From:** Harvey, Mary  
**Sent:** Thursday, May 22, 2008 4:14 PM  
**To:** 'Mr. Mark Hornick, TECO'; 'Mr. Joshua Ellwein, P.E., TECO'; 'Mr. Byron Burrows, TECO'; Nasca, Mara; 'Mr. Gregg Worley, EPA Region 4'; 'Ms. Katy Forney, EPA Region 4'  
**Cc:** Holtom, Jonathan; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION  
**Attachments:** 1050233.021.AC.D\_pdf.zip

Tracking:	Recipient	Delivery	Read
	'Mr. Mark Hornick, TECO'		
	'Mr. Joshua Ellwein, P.E., TECO'		
	'Mr. Byron Burrows, TECO'		
	Nasca, Mara	Delivered: 5/22/2008 4:14 PM	Read: 5/22/2008 7:08 PM
	'Mr. Gregg Worley, EPA Region 4'		
	'Ms. Katy Forney, EPA Region 4'		
	Holtom, Jonathan	Delivered: 5/22/2008 4:14 PM	Read: 5/22/2008 4:59 PM
	Walker, Elizabeth (AIR)	Delivered: 5/22/2008 4:14 PM	Read: 5/22/2008 4:49 PM
	Gibson, Victoria	Delivered: 5/22/2008 4:14 PM	Read: 5/22/2008 4:15 PM

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<http://www.adobe.com/products/acrobat/readstep.html>.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

5/28/2008

## Harvey, Mary

---

**From:** Mark Hornick [mjhornick@tecoenergy.com]  
**Sent:** Tuesday, May 27, 2008 8:29 AM  
**To:** Harvey, Mary  
**Subject:** Re: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRICCOMPANY - POLK POWER STATION

I have received the subject transmittal

Mark Hornick  
General Manager  
Polk Power Station  
Tampa Electric Company  
863 428-5988 (office)  
813 376 6643 (cell)  
mjhornick@tecoenergy.com

>>> "Harvey, Mary" <Mary.Harvey@dep.state.fl.us> 05/22/2008 4:14 PM

>>>

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Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

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Thank you,

DEP, Bureau of Air Regulation

The Department of Environmental

Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and

improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of

service you received. Copy the url below to a web browser to complete the DEP

survey:

<http://survey.dep.state.fl.us/?refemail=Mary.Harvey@dep.state.fl.us>

Thank you in advance for completing the survey.

## Harvey, Mary

---

**From:** Holtom, Jonathan  
**To:** Harvey, Mary  
**Sent:** Thursday, May 22, 2008 4:59 PM  
**Subject:** Read: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

### Your message

**To:** 'Mr. Mark Hornick, TECO'; 'Mr. Joshua Ellwein, P.E., TECO'; 'Mr. Byron Burrows, TECO'; Nasca, Mara; 'Mr. Gregg Worley, EPA Region 4'; 'Ms. Katy Forney, EPA Region 4'  
**Cc:** Holtom, Jonathan; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION  
**Sent:** 5/22/2008 4:14 PM

was read on 5/22/2008 4:59 PM.

## Harvey, Mary

---

**From:** Byron Burrows [btburrows@tecoenergy.com]  
**Sent:** Thursday, May 22, 2008 4:55 PM  
**To:** Harvey, Mary  
**Subject:** Re: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRICCOMPANY - POLK POWER STATION

Received. Thanks!

From BlackBerry  
Byron Burrows  
Mob: 813.230.3445

-----Original Message-----

From: "Harvey, Mary" <Mary.Harvey@dep.state.fl.us>  
Cc: Elizabeth (AIR) Walker <Elizabeth.Walker@dep.state.fl.us>  
Cc: Jonathan Holtom <Jonathan.Holtom@dep.state.fl.us>  
To: Mara Nasca <Mara.Nasca@dep.state.fl.us>  
Cc: Victoria Gibson <Victoria.Gibson@dep.state.fl.us>  
To: EPA Region 4 Ms. Katy Forney <FORNEY.KATHLEEN@EPA.GOV>  
To: EPA Region 4 Mr. Gregg Worley <WORLEY.GREGG@EPAMAIL.EPA.GOV>  
To: Mark Hornick <mjhornick@tecoenergy.com>  
To: Joshua Ellwein <jdellwein@tecoenergy.com>  
To: Byron Burrows <btburrows@tecoenergy.com>

Sent: 5/22/2008 4:14:19 PM

Subject: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

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Thank you,

DEP, Bureau of Air Regulation

The Department of Environmental

Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and

improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of

service you received. Copy the url below to a web browser to complete the DEP

## Harvey, Mary

---

**From:** Walker, Elizabeth (AIR)  
**To:** Harvey, Mary  
**Sent:** Thursday, May 22, 2008 4:49 PM  
**Subject:** Read: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

Your message

**To:** 'Mr. Mark Hornick, TECO'; 'Mr. Joshua Ellwein, P.E., TECO'; 'Mr. Byron Burrows, TECO'; Nasca, Mara; 'Mr. Gregg Worley, EPA Region 4'; 'Ms. Katy Forney, EPA Region 4'  
**Cc:** Holtom, Jonathan; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION  
**Sent:** 5/22/2008 4:14 PM

was read on 5/22/2008 4:49 PM.



## Harvey, Mary

---

**From:** Nasca, Mara  
**Sent:** Thursday, May 22, 2008 7:10 PM  
**To:** Harvey, Mary  
**Subject:** Re: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

Thanks Mary

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Harvey, Mary  
To: 'Mr. Mark Hornick, TECO' <MJHORNICK@TECOENERGY.COM>; 'Mr. Joshua Ellwein, P.E., TECO' <JDELLWEIN@TECOENERGY.COM>; 'Mr. Byron Burrows, TECO' <BTBURROWS@TECOENERGY.COM>; Nasca, Mara; 'Mr. Gregg Worley, EPA Region 4' <WORLEY.GREGG@EPAMAIL.EPA.GOV>; 'Ms. Katy Forney, EPA Region 4' <FORNEY.KATHLEEN@EPA.GOV>  
Cc: Holtom, Jonathan; Walker, Elizabeth (AIR); Gibson, Victoria  
Sent: Thu May 22 16:14:19 2008  
Subject: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

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Thank you,

DEP, Bureau of Air Regulation

## Harvey, Mary

---

**From:** Nasca, Mara  
**To:** Harvey, Mary  
**Sent:** Thursday, May 22, 2008 7:08 PM  
**Subject:** Read: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

### Your message

**To:** 'Mr. Mark Hornick, TECO'; 'Mr. Joshua Ellwein, P.E., TECO'; 'Mr. Byron Burrows, TECO'; Nasca, Mara; 'Mr. Gregg Worley, EPA Region 4'; 'Ms. Katy Forney, EPA Region 4'  
**Cc:** Holtom, Jonathan; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION  
**Sent:** 5/22/2008 4:14 PM

was read on 5/22/2008 7:08 PM.

## Harvey, Mary

---

**From:** Gibson, Victoria  
**To:** Harvey, Mary  
**Sent:** Thursday, May 22, 2008 4:15 PM  
**Subject:** Read: DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION

### Your message

**To:** 'Mr. Mark Hornick, TECO'; 'Mr. Joshua Ellwein, P.E., TECO'; 'Mr. Byron Burrows, TECO'; Nasca, Mara; 'Mr. Gregg Worley, EPA Region 4'; 'Ms. Katy Forney, EPA Region 4'  
**Cc:** Holtom, Jonathan; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** DRAFT PERMIT #1050233-021-AC/PSD-FL-194H - TAMPA ELECTRIC COMPANY - POLK POWER STATION  
**Sent:** 5/22/2008 4:14 PM

was read on 5/22/2008 4:15 PM.