



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

September 24, 2004

Mark J. Hornick  
General Manager  
Tampa Electric Company/ Polk Power Station  
P.O. Box 111  
Tampa, FL 33601-0111

Re: Air Construction Permit  
DRAFT Permit Project No: 1050233-017-AC  
Polk Power Station

Dear Mr. Hornick:

One copy of the DRAFT Permit for the construction of a chiller for the Polk Power Station located at 9995 State Route 37 South, Mulberry, Polk County, is enclosed. The permitting authority's "INTENT TO ISSUE AIR CONSTRUCTION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to James K. Pennington, P.E., at the above letterhead address. If you have any other questions, please contact him, at 850/921-9515.

Sincerely,

Trina L. Vielhauer  
Chief, Bureau of Air Regulation

TLV/jkp

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

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

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

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DRAFT Permit Project No.: 1050233-017-AC  
Polk Power Station  
Polk County

**INTENT TO ISSUE AIR CONSTRUCTION PERMIT**

The Bureau of Air Regulation (permitting authority) gives notice of its intent to issue an Air Construction Permit (copy of DRAFT Permit attached) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Tampa Electric Company, applied on August 24, 2004 to the permitting authority for an Air Construction Permit for a chiller for the Polk Power Station located at 9995 State Route 37 South, Mulberry, Polk County.

The permitting authority has permitting jurisdiction 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. This source is not exempt from Title V permitting procedures. The permitting authority has determined that an Air Construction Permit is required to commence construction at the described facility.

The permitting authority intends to issue this Air Construction Permit based on the belief that reasonable assurances have been provided to indicate that construction of the chiller will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT." The 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. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting 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 the address or telephone number listed below. The applicant shall provide proof of publication to the Bureau of Air Regulation, MS 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. 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.

The permitting authority will issue the FINAL Permit, in accordance with the conditions of the attached DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

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 (received) in the Office of General Counsel, MS 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 (Telephone: 850/245--2242, Fax: 850/245-2298). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, 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 fourteen 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 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 how and when each petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action 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 notice of intent. 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 will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within

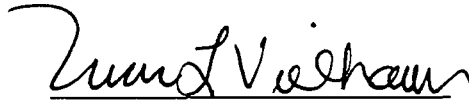
DRAFT Permit No.: 1050233-017-AC

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the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

Bureau of Air Regulation



Trina L. Vielhauer

Chief, Bureau of Air Regulation



**PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT**

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 1050233- 017-AC

Tampa Electric Company  
Polk Power Station  
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Tampa Electric Company's Polk Power Station located at 9995 State Route 37 South, Mulberry, Polk County, Florida for the construction of a MDEA chiller for use during the hottest months that will allow additional collection of hydrogen sulfide gas from the syngas stream prior to combustion in the turbine thereby reducing emissions of sulfur dioxide. The applicant's name and address are: Tampa Electric Company, P.O. Box 111, Tampa, Florida 33601-0111.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen 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 will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department'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 how and when petitioner received

Notice for Newspaper

notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (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; and (g) A statement of the relief sought by the petitioner, stating precisely the action 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 Department'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

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-0114  
Fax: 850/922-6979

Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8218  
Telephone: 813/744-6100  
Fax: 813/744-6084

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Program Administrator, North Permitting Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.





# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

## P.E. Certification Statement

**Permittee:** Tampa Electric Company  
Polk Power Station

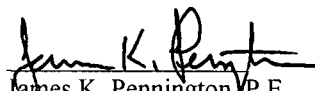
**DRAFT Permit No.:** 1050233-017-AC

### Project: Air Construction Permit

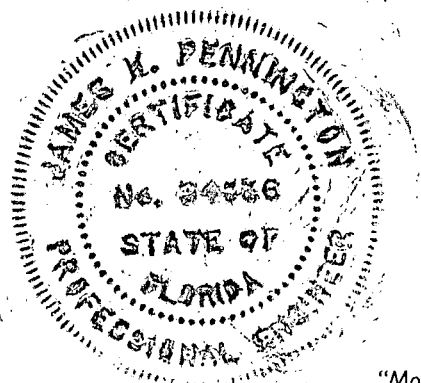
The regulated emissions units at the coal gasification facility include a 260 megawatt (electric) combined cycle combustion turbine which fires syngas or No. 2 fuel oil; an auxiliary boiler which fires No. 2 fuel oil; a sulfuric acid plant; a solid fuel handling system; and a solid fuel gasification system. The integrated coal gasification combined cycle combustion turbine is a General Electric Model Number 7F, 260 megawatt (electric) unit capable of firing syngas or No. 2 fuel oil. The maximum heat input at 59° F is 1,755 million Btu per hour when firing syngas and 1,765 million Btu per hour when firing No. 2 fuel oil. The combustion turbine uses nitrogen diluent injection when firing syngas and water injection when firing No. 2 fuel oil to control emissions of nitrogen oxides. The Auxiliary Boiler produces steam for in-plant use and has a maximum heat input of 120.0 million Btu per hour. The boiler is fired with only very low sulfur fuel oil and has a capacity factor of less than or equal to 35 percent. The boiler can be continuously fired in a standby mode with full operation limited to a maximum of 3,000 hours per year. No add-on emissions control devices are employed by the emissions unit. The sulfuric acid plant takes a sulfur gas stream from the solid fuel gasification plant's hot gas cleanup or cold gas cleanup systems and converts it to sulfuric acid. The sulfuric acid plant has a 15 million Btu per hour, propane fired, H<sub>2</sub>S to SO<sub>2</sub> conversion furnace which vents to the atmosphere only during warm-up; and a 9 million Btu per hour, propane fired, non-contact SO<sub>2</sub> to SO<sub>3</sub> converter preheater which is vented to the atmosphere. The sulfuric acid plant has a maximum production rate of 77,640 tons per year of 100 percent sulfuric acid. Fuel and water are mixed in the rod mill crushers to produce a slurry. The solid fuel gasification system receives the slurry from the system and converts the fuel to syngas. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities. Based on the renewal Title V permit application received April 22, 2004, this facility is not a major source of hazardous air pollutants (HAPs).

*I HEREBY CERTIFY that the 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, and geological features).*

*This draft permit was prepared by me with input from Bureau of Air Regulation personnel as needed.*

  
James K. Pennington, P.E.  
Registration Number: 34536

9/29/04  
date



Permitting Authority:  
Department of Environmental Protection  
Bureau of Air Regulation  
111 South Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-0144  
Fax: 850/922-6979

"More Protection, Less Process"

Technical Evaluation  
and  
Preliminary Determination

Tampa Electric Company  
Polk Power Station  
Polk County, Florida

Construction of MDEA Chiller  
Cold Gas Cleanup to Sulfuric Acid Plant

Construction Permit No. 1050233-017-AC  
Minor Construction

Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation

September 24, 2004

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## I. GENERAL INFORMATION

### A. Applicant

Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601-0111

### B. Facility Location

This facility is located at 9995 State Route 37 South, Mulberry, Polk County; UTM Coordinates: Zone 17, 402.45 km East and 3067.35 km North; Latitude: 27° 43' 43" North and Longitude: 81° 59' 23" West.

Facility Identification Code (SIC): Major Group No. 49 Industry Group No. 4911

## II. DESCRIPTION/EMISSIONS

### A. Process Description

The Polk Unit 1 Acid Gas Removal System removes hydrogen sulfide (H<sub>2</sub>S) from the syngas prior to the combustion turbine. The syngas is contacted with the Methyldiethanol amine (MDEA) and the H<sub>2</sub>S is absorbed from the syngas into the MDEA.

### B. Project Description

The project is to construct a heat exchanger, pumps and connections for the chilling of the Methyldiethanol amine (MDEA) by about 2 degrees Fahrenheit so as to optimize the absorption of hydrogen sulfide (H<sub>2</sub>S) during hot weather encountered for about 7 months of the year.

### C. Emissions

#### *Sulfur dioxide reductions*

The following table contains the existing emission limits for the facility's combustion turbine burning syngas. The actual SO<sub>2</sub> emissions will be reduced as a result of this project by about 32 tons per year of SO<sub>2</sub>.

POLLUTANT	EXISTING EMISSION LIMIT	LIMIT BASIS
SO <sub>2</sub> (Stack)	357.0 lb/hr and 1,563.66 TPY	PSD Major

## III. RULE APPLICABILITY

The proposed project is subject to the applicable provisions of Chapter 403, Florida Statutes, Chapter 62-4, Florida Administrative Code (F.A.C.). This facility is located in an area designated attainment for all criteria pollutants in accordance with F.A.C. Rule 62-275.400.

## **TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

The emission units affected by this permit shall comply with all applicable provisions of the Florida Administrative Code and, specifically, the following Chapters and Rules:

Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.800	Federal Regulations Adopted By Reference
Rule 62-210.200	Definitions
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Chapter 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.400	Compliance Test Methods

### **IV. AIR QUALITY IMPACT ANALYSIS**

#### **A. Air Quality Analysis**

The proposed project will decrease emissions of the following pollutant during the hot weather months: SO<sub>2</sub>. SO<sub>2</sub> is a criteria pollutant and has national and state ambient air quality standards (AAQS), PSD increments, and significant impact levels defined for it. No air quality dispersion modeling was done for SO<sub>2</sub> as this construction project will decrease emissions during the hotter weather months.

### **V. CONCLUSION**

Based on the foregoing technical evaluation of the application and the information submitted by Tampa Electric Company, the Department has made a preliminary determination that the proposed project will comply with all applicable state air pollution regulations.

*Permit Engineer: James K. Pennington, P.E.*

*Reviewed and Approved by James K. Pennington, P.E.  
Administrator, North Permitting Section*

**PERMITTEE**

Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601-0111

<b>Permit No.</b>	1050233-017-AC
<b>Project</b>	MDEA Chiller
<b>SIC No.</b>	49, 4911
<b>Expires:</b>	^DRAFT

**Authorized Representative:**

Mark J. Hornick, General Manager – Polk Power Station

**PROJECT AND LOCATION**

This permit authorizes Tampa Electric Company to construct a chiller for the MDEA absorbent to allow better absorption of hydrogen sulfide to ultimately lower emissions of sulfur dioxide (SO<sub>2</sub>) during hot weather at the existing Polk Power Station.

This facility is located at 9995 State Route 37 South, Mulberry, Polk County; UTM Coordinates: Zone 17, 402.45 km East and 3067.35 km North; Latitude: 27° 43' 43" North and Longitude: 81° 59' 23" West.

**STATEMENT OF BASIS**

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to construct the emissions units 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 of Environmental Protection (Department).

**APPENDICES**

The attached appendix is a part of this permit:

Appendix GC      General Permit Conditions

**DRAFT**

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Michael G. Cooke, Director  
Division of Air Resource  
Management

**AIR CONSTRUCTION PERMIT**  
**SECTION I. FACILITY INFORMATION**

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**FACILITY AND PROJECT DESCRIPTION**

The existing facility consists of a 260 megawatt (electric) combined cycle combustion turbine which fires syngas or No. 2 fuel oil; an auxiliary boiler which fires No. 2 fuel oil; a sulfuric acid plant; a solid fuel handling system; a solid fuel gasification system; and, two nominal 165 megawatt simple cycle gas turbines firing either natural gas or No. 2 fuel oil.

The applicant requested a revision to their Title V permit, on August 23, 2004, to construct a chiller for the MDEA absorbent stream.

There are no emissions increases associated with this project.

The facility information, project scope, emissions and rule applicability are described in detail in the Department's Technical Evaluation and Determination.

**REVIEWING AND PROCESS SCHEDULE**

August 23, 2004	Received permit application (no application fee required)
September 13, 2004	Application complete
^DRAFT	Distributed Notice of Intent to Issue and supporting documents
^DRAFT	Notice of Intent published in ^DRAFT

**RELEVANT DOCUMENTS**

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Permit application
- Department's Technical Evaluation and Determination
- Department's Intent to Issue

## AIR CONSTRUCTION PERMIT

### SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

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The following Specific Conditions apply to all emissions units at this facility addressed by this permit.

#### ADMINISTRATIVE

1. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, phone number 850/488-0114. All documents related to reports, tests, minor modifications and notifications shall be submitted to the Department's Southwest District office at 3804 Coconut Palm Drive, Tampa, Florida 33619-8218, and phone number 813/744-6100.
2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403, F.S. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. 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, F.S.; Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297, F.A.C.; and, the Code of Federal Regulations Title 40, Part 60, adopted by reference in the F.A.C. regulations. 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 facility owner or operator 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.]
5. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., 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.]
6. Expiration: This air construction permit shall expire on ^DRAFT. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4), 62-4.080, and 62-4.210, F.A.C.]
7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit must be obtained prior to the beginning of construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
8. Title V Operation Permit Required: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A revision to the Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a Title V operation permit at least ninety 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

## AIR CONSTRUCTION PERMIT

### SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

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results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Southwest District office. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

#### OPERATIONAL REQUIREMENTS

9. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department's Southwest District office. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its 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 Department rules. [Rule 62-4.130, F.A.C.]
10. Circumvention: No person shall circumvent any air pollution control device or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
11. Excess Emissions: This permit does not change any authorization for excess emissions provided by other Department permits for other emissions units. The following excess emissions provisions of state rule apply to this emissions unit (emissions unit 006) as specified below.
  - (a) Excess emissions resulting from start-up and shutdown are permitted for emissions unit 006 providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period.
  - (b) Excess emissions resulting from malfunction of this emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
  - (c) 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 start-up, shutdown, or malfunction shall be prohibited.

[Rules 62-210.700(1), (4) and (5), F.A.C.]

#### COMPLIANCE MONITORING AND TESTING REQUIREMENTS

12. Determination of Process Variables: [Rule 62-297.310(5), F.A.C.]
  - (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



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### SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

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with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

#### REPORTING AND RECORD KEEPING REQUIREMENTS

13. Duration of Record Keeping: 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. 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 for this permit. These materials shall be retained at least five years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. [Rules 62-4.160(14)(a)&(b) and 62-213.440(1)(b)2.b., F.A.C.]
14. Excess Emissions Report: In case of excess emissions resulting from malfunction, the owner or operator shall notify the Department's Southwest District office within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. A full written report on the malfunctions shall be submitted in a quarterly report if requested by the Department. [Rules 62-4.130 and 62-210.700(6), F.A.C.]
15. Annual Operating Report for Air Pollutant Emitting Facility: The Annual Operating Report for Air Pollutant Emitting Facility shall be completed each year and shall be submitted to the Department's Southwest District office and, if applicable, the appropriate local program by March 1 of the following year. [Rule 62-210.370(3), F.A.C.]

**AIR CONSTRUCTION PERMIT**  
**SECTION III. SPECIFIC CONDITIONS**

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The following Specific Conditions apply to the following emissions units after construction.

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

**E.U. ID**

<b><u>No.</u></b>	<b><u>Brief Description</u></b>
-004	Sulfuric Acid Plant

The sulfuric acid plant takes a sulfur gas stream from the solid fuel gasification plant's hot gas cleanup or cold gas cleanup systems and converts it to sulfuric acid using the double contact process. The sulfuric acid plant has a 15 million Btu per hour, propane fired, H<sub>2</sub>S to SO<sub>2</sub> conversion furnace which vents to the atmosphere only during warm-up; and a 9 million Btu per hour, propane fired, non-contact SO<sub>2</sub> to SO<sub>3</sub> converter preheater which is vented to the atmosphere. The sulfuric acid plant has a maximum production rate of 77,640 tons per year of 100 percent sulfuric acid. The MDEA chiller will be a component of the cold gas cleanup system and will be constructed to operate during hot weather.

{Permitting note(s): The emissions unit is regulated under Rule 62-296.402, F.A.C., Sulfuric Acid Plants. The MDEA chiller is incorporated into the facility's permit at the request of the permittee. No increase of emissions will result from the construction of the MDEA chiller.}

**The following Specific Conditions apply to the emissions unit(s) listed above:**

1. The MDEA chiller equipment will be installed pursuant to the OGC Consent Order 01-0122 as a supplemental environmental project that will reduce SO<sub>2</sub> emissions during the hotter months.

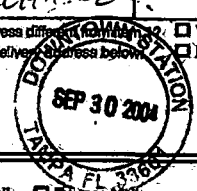
{The applicable SO<sub>2</sub> emission limits applicable to these units are already given in the mentioned Title V Operation Permit}

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Mark J. Hornick  
 General Manager  
 Tampa Electric Co. / Polk Power Station  
 P. O. Box 111  
 Tampa, FL 33601-0111

D. Is delivery address different from address above?  Yes  No  
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4. Restricted Delivery? (Extra Fee)  Yes  No

2. Article Number  
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PS Form 3811, August 2001

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