



Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

October 3, 2005

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Karen Sheffield, General Manager  
Big Bend Station  
Tampa Electric Company  
Post Office Box 111  
Tampa, Florida 33601-0111

Re: Big Bend Unit 3  
DEP File No. 0570039-022-AC  
Selective Catalytic Reduction System

Dear Ms. Sheffield:

Enclosed are documents indicating the Department's intent to issue an air construction permit for installation of a selective catalytic reduction system on Unit 3 at the Big Bend Station in Tampa. The documents include: the "Intent to Issue Air Construction Permit"; the "Public Notice of Intent to Issue Air Construction Permit"; the Department's "Technical Evaluation and Preliminary Determination"; and, the Draft Permit.

The Public Notice must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven (7) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Electronic versions of these documents have been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. The web site address is:

<http://www.dep.state.fl.us/air/eproducts/ards/default.asp> (Permit No. 0570039-022-AC)

Please submit any other written comments you wish to have considered concerning the Department's proposed action to Mr. A. A. Linero, Program Administrator, Permitting South Section at the above letterhead address. If you have any questions, please call Tom Cascio at 850/921-9526 or Mr. Linero at 850/921-9523.

Sincerely,

Trina L. Vielhauer, Chief  
Bureau of Air Regulation

TLV/aal/tc

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an  
Application for Permit by:

Ms. Karen Sheffield, General Manager  
Big Bend Station  
Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601-0111

DEP File No. 0570039-022-AC  
Nitrogen Oxides Reduction Project  
Selective Catalytic Reduction  
Big Bend Station Unit No. 3  
Hillsborough County

### INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of permit attached) for the project, detailed in the application specified above and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Tampa Electric Company (TEC), operates the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County. TEC applied on June 6, 2005, for an air construction permit to install a selective catalytic reduction (SCR) system for nitrogen oxides (NO<sub>x</sub>) control on the facility's Unit No. 3 coal-fired boiler. The project is part of a larger program by TEC pursuant to a Consent Final Judgment with the Department and a Consent Decree with the Environmental Protection Agency to reduce emissions from the coal fired plants. This air construction permit will also establish these specific projects as applicable requirements for subsequent incorporation into the facility Title V Operation Permit.

The Department has permitting jurisdiction under the provisions of Chapter 403.087, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. This action is not exempt from permitting procedures. The Department has determined that an air construction permit is required.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., 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 in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. 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 Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final construction 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 fourteen (14) days from the date of publication of Public Notice. 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 written 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 construction 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.

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 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.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply 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, 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 EPA 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.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief  
Bureau of Air Regulation

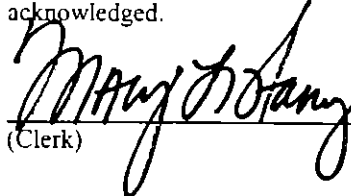
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice, Technical Evaluation and Preliminary Determination, and the Draft permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail or by e-mail before the close of business on 10/5/05 to the person(s) listed:

Karen Sheffield, General Manager, TEC Big Bend Station\*  
Thomas Davis, P.E., Environmental Consulting and Technology, Inc.  
Shelly Castro, TEC  
Alice Harman, EPCHC  
Jason Waters, FDEP-SWD  
David Lloyd, EPA Region 4

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
(Clerk)

10/5/05  
(Date)

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

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0570039-022-AC

Tampa Electric Company  
Big Bend Station, Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the Tampa Electric Company (TEC) for the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County. This permit is for installation of a selective catalytic reduction (SCR) system on Steam Generator No. 3 for the reduction of emissions of nitrogen oxides (NO<sub>x</sub>). A Best Available Control Technology (BACT) determination was not required pursuant to Rules 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The applicant's mailing address is: Tampa Electric Company, P.O. Box 111, Tampa, Florida 33601-0111.

The SCR project is part of a larger program by TEC pursuant to a Consent Final Judgment (CFJ) with the Department and a Consent Decree (CD) with the Environmental Protection Agency to reduce emissions from its coal fired plants. There have been very substantial reductions of sulfur dioxide (SO<sub>2</sub>) to-date primarily due to the installation of a scrubber on Units 1 and 2. Other NO<sub>x</sub> control projects including installation of Low NO<sub>x</sub> burners and separate overfire air were previously approved.

This air construction permit will establish the SCR project as an applicable requirement for subsequent incorporation into the facility's Title V Air Operation Permit. For reference, the permit will include a limit of 0.12 pounds of NO<sub>x</sub> per million Btu of heat input (lb/mmBtu) from Unit 3.

The new NO<sub>x</sub> emissions limit is much less than the other applicable limits of 0.53 lb/mmBtu and 0.70 lb/mmBtu for the same unit under the Federal Acid Rain Program and the applicable New Source Performance Standard. Further control of NO<sub>x</sub> will reduce smog formation potential in the Tampa Bay area. SCR in combination with the existing scrubber on Unit 3 is also expected to reduce mercury emissions.

The Department will issue the Final construction 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 construction permit issuance action for a period of fourteen (14) 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 written 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 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:

Dept. of Environmental Protection Bureau of Air Regulation Suite 4, 111 S. Magnolia Drive Tallahassee, Florida, 32301 Telephone: 850/488-0114 Fax: 850/922-6979	Dept. of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/774-6084	Hillsborough County Environmental Protection Commission Air Management Division 3629 Queen Palm Drive Tampa, Florida 33619 Telephone: 813/627-2600
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The complete project file includes the permit application, technical evaluation, Draft construction permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project, Tom Cascio at MS 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or [Tom.Cascio@dep.state.fl.us](mailto:Tom.Cascio@dep.state.fl.us), or call 850/921-9526 for additional information. Key documents may also be viewed at: [www.dep.state.fl.us/Air/permitting/construction.htm](http://www.dep.state.fl.us/Air/permitting/construction.htm) in the power plant category.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## 1.0 APPLICATION INFORMATION

### 1.1 Applicant Name and Address

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

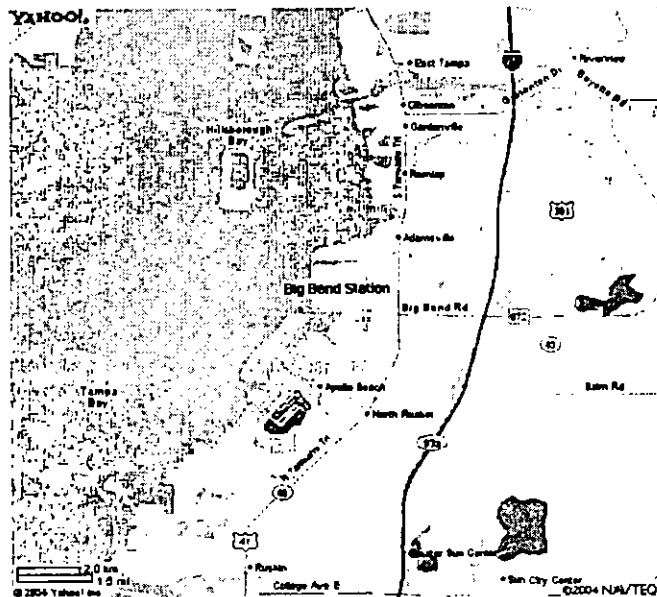
Representative: Karen Sheffield, General Manager, Big Bend Station

### 1.2 Reviewing and Process Schedule

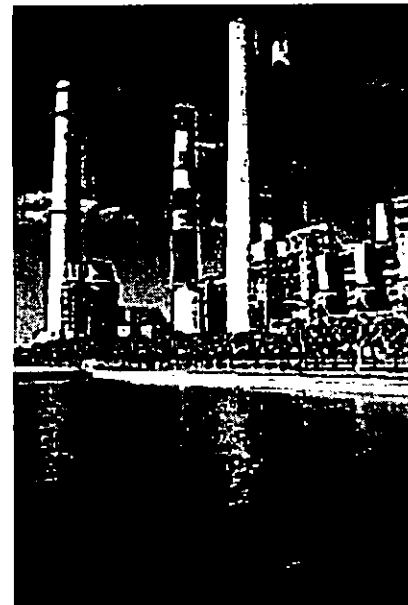
06-06-05: Date of receipt of request at FDEP Bureau of Air Regulation  
09-15-05: Application deemed complete  
Issued intent

## 2.0 FACILITY INFORMATION

### 2.1 Facility Location: Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County



**Figure 1. Ruskin, Apollo Beach, Big Bend**



**Figure 2. Big Bend Station**

### 2.2 Standard Industrial Classification Code (SIC)

Major Group No.	49	Electric, Gas, and Sanitary Services
Group No.	491	Electric Services
Industry No.	4911	Electric Services

### 2.3 Existing Facility/Emission Unit Description

This facility is an electric utility.  
This air construction permit will affect Steam Generator No. 3.

### 2.4 Regulatory Classification

Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V major source of air pollution in accordance with Chapter

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

62-213, F.A.C. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOC).

The existing facility is major source of hazardous air pollutants (HAPs).

The facility operates emissions units subject to the acid rain provisions of the Clean Air Act.

The facility is considered a "fossil fuel fired steam electric plant of more than 250 million BTU per hour of heat input". This kind of facility is one of the 28 source categories with the lower applicability threshold of 100 tons per year with respect to the Rule 62-212.400, Prevention of Significant Deterioration of Air Quality (PSD). Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a PSD-major source.

Unit 4 was certified pursuant Electrical Power Plant Siting in accordance with Chapter 62-17, F.A.C. and Chapter 403, Part II, F.S.

### **3.0 PERMITTING STATUS**

Operation of the Big Bend Station is authorized by the Title V Operation Permit Revision 0570039-017-AV that has an effective date of January 1, 2005, and expires on December 31, 2009. The current permit includes the applicable requirements from federal and state regulations and construction permits. It also includes a Consent Final Judgment (CFJ, DEP vs. TEC) dated December 6, 1999, and a Consent Decree (CD, EPA vs. TEC) dated February 29, 2000, and amended October 4, 2000. The CFJ and CD require substantial progressive emission reductions from the four coal fired steam generation units by specific dates.

The current Title V Operation Permit includes a number of projects or improvements pursuant to the CFJ and CD including: improved scrubbing efficiency on Units 1 and 2; Low NO<sub>x</sub> Burners (LNBs) on Units 1, 2, and 3; installation of new coal nozzles suitable for low NO<sub>x</sub> operation; modification redesign of windbox components to allow for proper distribution and staging of air; and installation of a separate overfire air (SOFA) system on Unit 4.

### **4.0 ADDITIONAL NO<sub>x</sub> CONTROL REQUIREMENTS**

Section V.E. of the CFJ requires that:

*Tampa Electric Company shall add nitrogen oxide controls, repower or shut down Units 1 through 3 at Big Bend Station by May 2010 and at Unit 4 by May 2007. If SCRs or similar nitrogen oxide controls are installed, BACT for nitrogen oxide will be 0.10 lbs/mmBtu on Unit 4 and 0.15 lbs/mmBtu on Units 1, 2, and 3.*

Section IV.B.36 of the CD requires that:

*Tampa Electric shall advise EPA in writing, on or before May 1, 2007, whether Big Bend Units 1, 2, or 3, or any combination of them, will be Shutdown, will be Re-Powered, or will continue to be fired by coal.*



## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

By letter dated August 19, 2004, Tampa Electric advised EPA that:

*Based on the results of a recent comprehensive study performed on Big Bend Station, Big Bend Units 1, 2, 3 and 4 will continue to be fired on coal and as such will comply with the applicable provisions of the Consent Decree associated with this decision.*

Section IV.B.37.A of the CD requires that:

*... Tampa Electric shall install, at each Unit that will continue to combust coal, the NO<sub>x</sub> control technology designed to achieve the lowest Emission Rate that can be attained within the "installation cost ceiling." Notwithstanding any provision of this Consent Decree, including the "installation cost ceiling," Tampa Electric shall install NO<sub>x</sub> control technology that is designed to achieve an Emission Rate no less stringent than 0.15 lb/mmBTU.*

By letter dated May 31, 2005, Tampa electric advised EPA that:

*The actual cost to install SCRs on Big Bend Units 1 through 3 is projected to be \$264,387,249. Since the installation cost ceiling has been exceeded by \$39,018,183, a NO<sub>x</sub> emission limit of 0.15 lb/MMBtu is clearly applicable under Paragraph 37 of the CD.*

In an e-mail memorandum from EPA dated September 15, 2005, the Department received the following additional information related to the proposed project:

*As we discussed over the phone, here is a status update concerning NO<sub>x</sub> limits at Big Bend. EPA/DOJ and TECO have reached a verbal agreement to amend the Consent Decree in the following manner:*

- 1. Assign a NO<sub>x</sub> "emissions rate" for Big Bend Units 1, 2 and 3 of 0.12 lbs/mmBtu.*
- 2. Modify the definition of "emissions rate" so that an equation is used that divides total pounds by total heat in each 30-day period to reach a 30-day rolling average.*

### **TAMPA ELECTRIC PROPOSAL TO COMPLY WITH CFJ AND CD**

By letter dated July 15, 2004, Tampa Electric submitted a petition to the Florida Public Service Commission for approval of new environmental programs for cost recovery through the environmental Recovery Clause at Section 366.8255, Florida Statutes.

The petition summarizes the CFJ and CD and includes a study conducted by Tampa Electric and its consultant, Sargent Lundy. The study justifies the decision to continue operating Units 1 through 4 as coal-fired units and installing SCR to comply with the NO<sub>x</sub> requirements of the CFJ and CD.

The repowering options evaluated in the study included reboiling with subcritical pulverized coal ("PC") boilers, circulating fluidized bed ("CFB") boilers, conversion of

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

the existing boilers to natural gas, combined cycle (“CC”) gas turbine technology and IGCC similar to the Polk facility.

The greenfield options evaluated in the Study included all the foregoing repowering technologies with the exceptions that new PC boilers would be supercritical, and natural gas fired Rankin cycle units would not be evaluated due to lower cycle heat rates.

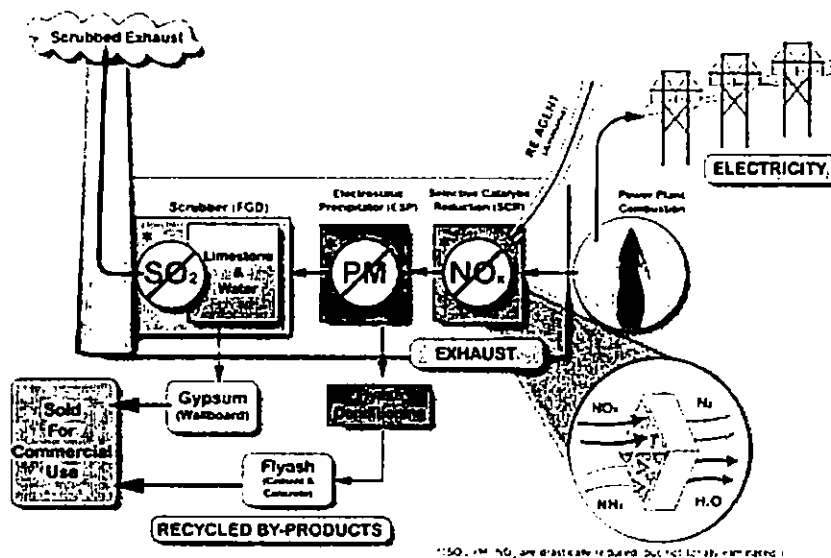
The cost to install SCR on the four existing coal-fired units was estimated to be \$305,450,000 whereas the cost of the least expensive CFB repowering option was estimated to be \$700,000,000 more. The cost to install SCRs on Units 1 through 3 was projected to be \$264,387,249. The annual operating and maintenance costs for the four units were estimated to be \$12,750,000.

By an order dated October 11, 2004, and consummated (made final) on November 4, 2004, the PSC granted Tampa Electric’s petition.

## 5.0 SCR PROJECT ON UNIT 3

Much of the following description is from the application submitted to the Department on June 6, 2005. Some additional details are from the Tampa Electric website or their filings with the PSC.

Figure 3 is a diagram of the proposed SCR installation. This configuration is typically known as dusty or hot side SCR meaning it is placed before the electrostatic precipitator.



**Figure 3. Diagram of SCR Installation and Existing Pollution Control Equipment**

Following are key points regarding the proposed project:

- The SCR system will be installed downstream of the economizer and upstream of the preheater.
- The SCR reactor will be designed as a “three plus one” catalyst configuration. It is planned that the fourth catalyst management layer, designed to maximize the residual

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

catalyst life and lower operating costs, will be initially empty and will be charged as the initial three catalyst layers lose activation.

- The applicant has indicated that available options with respect to ammonia type and supply are currently being evaluated. Thus, details of the installation of an ammonia storage, supply, and injection system are still under development. The options include use of anhydrous ammonia supplied by pipeline without on-site storage. TEC has indicated that they not have any management control over the operation of the pipeline. The Department will be sent update reports as the study progresses.
- SCR tuning (i.e., adjustment of the ammonia injection grid) will be performed during the initial commissioning of the system.
- The Applicant will install an ammonia injection system immediately downstream of the Unit No. 3 air preheater to control the increase of sulfur trioxide (SO<sub>3</sub>) that the applicant expects will result from the use of a vanadium-containing catalyst in SCR systems.
- The Applicant has proposed that ammonia slip, measured at the stack downstream of all emissions control systems, be targeted at 5 parts per million by volume (ppmv). Annual testing of ammonia slip will be conducted and corrective measures taken if this target level is exceeded.
- The basic boiler startup and shutdown procedures will not need to be altered with the addition of the SCR (i.e., the existing Unit No. 3 boiler ramp rate is adequate for the SCR catalyst).
- The Applicant reviewed the impact that the operation of an SCR system would have on coal combustion by-products and found that the fly ash would have limited marketability due to high ammonia content and carbon content. Therefore, a large portion of the fly ash could potentially need to be disposed of in a landfill. The Applicant researched this issue and found that other companies mitigate the SCR impact on fly ash by using carbon burnout technology (CBO) to reduce the carbon content. The Applicant evaluated this technology, has determined it to be feasible at the facility, and has submitted an air construction permit application to the Department to implement the CBO technology.

More specific details of the capital cost components of the SCR system include:

- Demolition of existing flue gas ductwork as necessary to tie-in the SCR system
- Demolition of existing structural steel, modification and reinforcement of existing steel supports for a new duct from the existing steel
- Economizer bypass for gas temperature control
- Gas ductwork from economizer outlet to the SCR inlet (includes hoppers, mixers and turning vanes)
- SCR reactor (includes equipment for catalyst management)
- Gas ductwork between the SCR & air heater
- Foundations for ductwork and structural steel

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- Structural modifications for construction cranes
- Electrical modifications
- Relocation of existing equipment and utilities
- Mobilization/demobilization
- Equipment rental
- Engineering construction management
- New and modified ductwork
- Auxiliary power and controls modifications

The Department notes that the scrubber should be able to remove SO<sub>3</sub> formed in the SCR system and ammonium sulfate/sulfite/bisulfite species to a high degree. The Department notes that with respect to combustion by-products, the ash would most likely be affected by previous combustion modifications rather than by the SCR system. The SCR system could have some effect on the ash due to presence of ammonia, some of which could adhere to the fly ash.

## 6.0 PROJECT SCHEDULE

Emissions Unit ID Number	Estimated Start Date	Estimated Completion Date
003	November 1, 2005	May 1, 2008

## 7.0 PROJECT EMISSIONS & RULE APPLICABILITY

There will be a decrease in the allowable emissions of nitrogen oxides (NO<sub>x</sub>) as a result of implementing this project. Noted below are the existing limits and the proposed changes for the pollutant:

Pollutant	Existing limits	Proposed limit
Nitrogen Oxides (NO <sub>x</sub> )	<p>0.70 pounds per mmBtu heat input (Title V Permit Specific Condition A.10.), based on a 30-day rolling average.</p> <p>0.53 pounds per mmBtu heat input (Acid Rain Part requirement using the NO<sub>x</sub> emissions averaging plan).</p> <p>Heat input to Unit No. 3 is limited to 4115 mmBtu/hour.</p>	<p>0.12 pounds per mmBtu heat input. This emission limit is based on the definition of "emission rate" so that an equation is used that divides total pounds of NO<sub>x</sub> by total heat input in each 30-day period to reach a 30-day rolling average.</p> <p>Emissions will be continuously monitored to confirm compliance, using the Unit's existing continuous emissions monitoring system (CEMS).</p>

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

According to the EPA Clean Air Markets Website, Unit 3 emitted 0.57 lb/mmBtu in 1998. In 2003, Unit 3 emitted 0.55 lb/mmBtu. Emissions through the first quarter of 2005 indicate emissions of 0.48 lb/mmBtu. This shows that a modest reduction to-date has been achieved.

Further reduction to 0.10 lb/mmBtu can be accomplished without aggressive ammonia or urea injection. This supports the idea that SCR will not necessarily have as much effect on ash properties compared with similar projects at other plants. It is possible that Tampa Electric can back off somewhat in the combustion techniques used to reduce NO<sub>x</sub> when SCR becomes available and then optimize the control stratagem to reduce impacts on ash.

Using the appropriate maximum heat input value for Unit No. 3 (i.e., 4,115 mmBtu/hour), and the existing and proposed emissions limits for NO<sub>x</sub> noted above, results in a calculation of the expected reduction of potential NO<sub>x</sub> emissions of about 7,390 tons per year. This is equivalent to a 77% reduction from current allowable limits under the Acid Rain Part of the facility's Title V Permit Renewal. Computations follow below:

$(0.53 - 0.12) \text{ lbs/mmBtu} = 0.41 \text{ lbs/mmBtu heat input reduction.}$

$0.41 \text{ lbs/mmBtu} \times 4115 \text{ mmBtu/hour} \times 8760 \text{ hours per year} / 2000 \text{ lbs/ton} = 7,390 \text{ tons per year.}$

Based on a more realistic estimate of an 80 percent capacity factor and the most recent emission rate of 0.48 lb/mmBtu, the calculations would be as follows:

$(0.48 - 0.12) \text{ lbs/mmBtu} = 0.36 \text{ lbs/mmBtu heat input reduction}$

$0.36 \text{ lbs/mmBtu} \times 4115 \text{ mmBtu/hour} \times (0.80) 8760 \text{ hours per year} / 2000 \text{ lbs/ton} = 5,191 \text{ tons per year}$

In summary, the addition of SCR to Unit No. 3 reduces actual as well as allowable NO<sub>x</sub> emissions, and does not involve any other significant changes related to emissions of other pollutants or operational parameters (e.g., mass flow to the stack, other than the addition of dilution air for ammonia injection, or stack temperature). The SCR system in combination with the existing scrubbers should help reduce mercury emissions as well.

It has been determined by the Department that the project is a Pollution Control Project, as defined in 40 CFR 52.21(b)(32), and meets the requirements of Rule 62-212.400(2)(a)2., F.A.C., and 40 CFR 52.21(b)(2)(iii)(h). Therefore, the project is not defined as a modification under Department regulations.

Furthermore the additional projects related to the SCR installation and enumerated above are projects in support of a pollution control project. They are treated as pollution control projects and do not constitute modifications under Department regulations.

The emission unit affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein), and all specific conditions of the facility's existing Title V Air Operation Permit Renewal No. 0590039-017-AV.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## **8.0 CONCLUSION**

Based on the foregoing technical evaluation of the application and other available information, the Department has made a determination that the proposed project will comply with all applicable state and federal air pollution regulations. The Department will issue a Draft Air Construction Permit to the applicant that provides for the above changes at the facility.



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

## DRAFT AIR CONSTRUCTION PERMIT NO. 0570039-022-AC

### PERMITTEE

Tampa Electric Company (TEC) <b>Big Bend Station</b> Post Office Box 111 Tampa, Florida 33601-0111	File/Permit No. <b>0570039-022-AC</b> Facility ID: 0570039 Project: NO <sub>x</sub> Reduction (SCR) Steam Generator Unit 3 SIC No. 4911 Expires: December 31, 2008 County Hillsborough
<i>Authorized Representative:</i> Karen Sheffield, General Manager	

### PROJECT AND LOCATION

This is an Air Construction Permit for the installation of a selective catalytic reduction system for nitrogen oxides control on the solid fuel-fired Steam Generator Unit No. 3. The reductions are part of an emissions reduction program required by a Consent Final Judgment with the Department and a Consent Decree with the United States Environmental Protection Agency. The air construction permit will also establish these specific projects as applicable Title V Operation Permit conditions.

The Tampa Electric Company (TEC) Big Bend Station is located at Wyandotte Road, Apollo Beach, Hillsborough County. UTM Coordinates are Zone 17, 361.9 km East and 3075.0 km North; Latitude: 27° 47' 36" North and Longitude: 82° 24' 11" West.

### STATEMENT OF BASIS

This Air 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.). The above named permittee is authorized to install the SCR system at the facility 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).

### THE ATTACHED APPENDIX IS MADE A PART OF THIS PERMIT:

Appendix GC                      Construction Permit General Conditions

\_\_\_\_\_  
Michael G. Cooke, Director  
Division of Air Resource Management

**FACILITY DESCRIPTION**

This facility consists primarily of four existing fossil fuel steam generators (boilers) and three simple-cycle combustion turbines. Emissions from all steam generators are controlled by electrostatic precipitators (ESPs), and flue gas desulfurization (FGD) systems. There are ongoing nitrogen oxides (NO<sub>x</sub>) control projects pursuant to a Consent Final Judgment (CFJ) between TEC and the Department and a Consent Decree (CD) between TEC and the United States Environmental Protection Agency (EPA).

**EMISSIONS UNITS**

This permit addresses the installation of an ammonia injection system and catalyst at the following Unit:

Emission Unit No.	System	Emission Unit Description
003	Power Generation	445 MW Fossil Fuel Steam Generator

The proposed project is called selective catalytic reduction (SCR). A recent NO<sub>x</sub> control project on Unit 3 includes installation of new coal nozzles suitable for low NO<sub>x</sub> operation.

**REGULATORY CLASSIFICATION**

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), or volatile organic compounds (VOC), exceed 100 tons per year (TPY).

The addition of SCR to Unit No. 3 reduces actual and allowable NO<sub>x</sub> emissions. It has been determined by the Department that the project is classified as a Pollution Control Project, as defined in 40 CFR 52.21(b)32, and meets the requirements of Rule 62-212.400(2)(a)2., F.A.C., and 40 CFR 52.21(b)(2)(iii)(h). Therefore, the project is not a modification under Department regulations.

**PERMIT SCHEDULE**

- Month day, 2005 Notice of Intent to Issue Permit published.
- Month day, 2005 Intent to Issue Permit distributed.
- September 15, 2005 Application deemed complete.
- June 6, 2005 Application received.

**RELEVANT DOCUMENTS**

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on June 6, 2005.
- The Department's Technical Evaluation and Preliminary Determination, issued concurrently with this draft air construction permit.
- EPA Consent Decree (U.S. vs. TEC) dated February 29, 2000, amended October 4, 2000.
- FDEP Consent Final Judgment (DEP vs. TEC) dated December 6, 1999.
- Title V Air Operation Permit Renewal No. 0570039-017-AV.
- Tampa Electric Submittals for PSC Docket 040750-EI.
- E-mail memorandum from EPA received on September 15, 2005.



## **PROJECT DESCRIPTION**

TEC will install a SCR system for NO<sub>x</sub> control on the facility's Unit No. 3 coal-fired boiler. This emissions unit is a Riley Stoker Corporation "wet" bottom utility boiler, with a generator nameplate rating of 445 megawatts (MW). The basic boiler startup and shutdown procedures will not need to be altered with the addition of the SCR (i.e., the existing Unit No. 3 boiler ramp rate is adequate for the SCR catalyst). The project consists of:

- Installation of a "three plus one" SCR reactor downstream of the economizer and upstream of the air preheater.
- Installation of an ammonia storage, supply, and injection system, the details of which are still under development.
- SCR tuning (i.e., adjustment of the ammonia injection grid) during the initial commissioning of the system.
- Installation of an ammonia injection sulfur trioxide (SO<sub>3</sub>) control system downstream of the Unit No. 3 air preheater.
- Assessment of combined effects of SCR and previous NO<sub>x</sub> and SO<sub>3</sub> control system projects upon fly ash marketability, and development of treatment, reuse, or disposal options for the fly ash.

The project is much more involved than suggested by the brief description above. Following are additional details of the work likely to occur in association with the SCR installation:

- Demolition of existing flue gas ductwork as necessary to tie-in the SCR system
- Demolition of existing structural steel, modification and reinforcement of existing steel supports for a new duct from the existing steel
- Economizer bypass for gas temperature control
- Gas ductwork from economizer outlet to the SCR inlet (includes hoppers, mixers and turning vanes)
- SCR reactor (includes equipment for catalyst management) and catalyst
- Gas ductwork between the SCR & air heater
- Foundations for ductwork and structural steel
- Structural modifications for construction cranes
- Ammonia injection system
- Electrical modifications
- Relocation of existing equipment and utilities
- Mobilization/demobilization
- Equipment rental
- Engineering construction management
- New and modified ductwork
- Auxiliary power and controls modifications

**PROJECT SCHEDULE**

Emissions Unit ID Number	Estimated start date	Estimated completion date
003	November 1, 2005	May 1, 2008

**ADMINISTRATIVE REQUIREMENTS**

**A.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, Florida Department of Environmental Protection, at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and phone number (850) 488-0114. All documents related to reports, tests, and notifications should be submitted to the Environmental Protection Commission of Hillsborough County, and copies of those submittals shall be sent to the Department of Environmental Protection, Southwest District Office.

Addresses and telephone numbers are:

Environmental Protection Commission of Hillsborough County  
1410 North 21 Street  
Tampa, Florida 33605  
Telephone: 813/272-5530; Fax: 813/272-5605

Department of Environmental Protection  
Southwest District Office, Air Resources Section  
3804 Coconut Palm Drive  
Tampa, Florida 33619-1352  
Telephone: 813/744-6100; Fax: 813/744-6084

**A.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 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

**A.3. Terminology.** The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code (F.A.C.).

**A.4. Forms and Application Procedures.** 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. [Rule 62-210.900, F.A.C.]

**A.5. Modifications.** The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]

**A.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.]

**A.7. Permit Extension.** The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rule 62-4.080, F.A.C.]

## APPLICABLE STANDARDS AND REGULATIONS

**A.8.** Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) 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., and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297.

**A.9.** Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

**A.10.** The facility is subject to all of the requirements specified in Title V Air Operation Permit Renewal No. 0570039-017-AV.

**A.10.1.** An application for a Title V Air Operation Permit Revision, pursuant to Chapter 62-213, F.A.C., must be submitted to the Department's Bureau of Air Regulation to incorporate the specific conditions of this Air Construction Permit. [Chapter 62-213, F.A.C.]

## GENERAL OPERATION REQUIREMENTS

**A.11.** 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.]

**A.12.** 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 owner or operator shall notify the Environmental Protection Commission of Hillsborough County as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the 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 and the regulations. [Rule 62-4.130, F.A.C.]

**A.13.** Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]

**A.14.** Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]

## CONTROL TECHNOLOGY

**A.15.** The permittee shall install a selective catalytic reduction (SCR) system for nitrogen oxides (NO<sub>x</sub>) control on the facility's Unit No. 3 solid fuel-fired boiler.  
[Applicant Request and EPA Consent Decree (U.S. vs. TEC) dated February 29, 2000, amended October 4, 2000, and FDEP Consent Final Judgment (DEP vs. TEC) dated December 6, 1999.]

## SCR OPERATION

**A.15.1.** The permittee shall operate the SCR system in accordance with the catalyst manufacturer's recommendations, including operating the SCR between minimum and maximum operating temperatures.

**A.15.2.** The partial SCR maintenance bypass duct is normally closed except during maintenance periods.

## EMISSION LIMITS AND STANDARDS

**A.16.** After April 30, 2008, NO<sub>x</sub> emissions (reported as NO<sub>2</sub>) from Unit No. 3 when combusting bituminous or anthracite coal, or a coal/petroleum coke blend, shall not exceed 0.12 lb/million Btu heat input. Based upon a heat input limit of 4115 million Btu/hour, NO<sub>x</sub> emissions shall not exceed 494 lb/hr. These emission limits are based on the definition of "emission rate" so that an equation is used that divides total pounds of NO<sub>x</sub> by total heat input in each 30-day period to reach a 30-day rolling average. [Applicant Request and EPA Consent Decree (U.S. vs. TEC) dated February 29, 2000, amended October 4, 2000, and FDEP Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; and E-mail memorandum from EPA received on September 15, 2005.]

{Permitting Note: Limits in this condition are sufficient to also comply with requirements of: Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.44a(a); 40 CFR 60.4a(c); and PSD-FL-040}

**A.17.** Ammonia slip, measured at the stack downstream of all emissions control systems, shall not exceed 10 parts per million by volume (ppmv). Annual testing of ammonia slip shall be conducted, and corrective measures taken if measured values exceed 5 ppmv. [Applicant request; and Rule 62-4.070(3), F.A.C.]

## COMPLIANCE DETERMINATION

**A.18.** Nitrogen oxides emissions shall be continuously monitored to confirm compliance, using the Unit's existing continuous emissions monitoring system (CEMS). Compliance is determined by calculating the arithmetic average of all hourly emission rates for NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.46a(g), 0570039-017-AV]

**A.19.** Compliance with the ammonia (NH<sub>3</sub>) slip limit shall be determined using EPA conditional test method (CTM-027), or other methods approved by the Department. [Rule 62-4.070(3), F.A.C.]

**A.20.** Compliance with the allowable emission limiting standards specified in this Air Construction Permit shall be determined by April 30, 2008, and annually thereafter, using the appropriate specific conditions of the facility's existing Title V Air Operations Permit No. 0570039-017-AV, by using the appropriate EPA reference test methods, or Department test methods. [0570039-017-AV; and Rules 62-204.220 and 62-4.070(3), F.A.C.]

**A.21.** Compliance with the additional 30-day NO<sub>x</sub> limit of 0.12 lb/mmBtu shall be demonstrated using CEMS data beginning May 31, 2008 (or 30 boiler operating days after May 1, 2008), and every 30 boiler operating days thereafter.

**A.22.** Test Results. Compliance test results shall be submitted to the Environmental Protection Commission of Hillsborough County and the Department no later than 45 days after completion of the last test run. [Rule 62-297.310(8), F.A.C.]

## NOTIFICATION, REPORTING, AND RECORDKEEPING

**A.23.** Emission Compliance Stack Test Reports. A test report indicating the results of the required compliance tests shall be filed as per Specific Condition **A.22**. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the compliance authority to determine if the test was properly conducted and if the test results were properly computed. [Rule 62-297.310(8), F.A.C.]

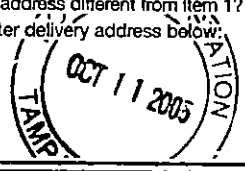
**COMPLIANCE ASSURANCE**

A.24. Compliance Assurance Monitoring (CAM). The permittee shall evaluate the applicability of CAM to Unit No. 3 and, if applicable, submit a CAM plan as a revision to the facility's current Title V air operation permit.

[40 CFR 64; and Rule 62-204.800, F.A.C.]

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<p>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits.</p>	<p>A. Signature  <input checked="" type="checkbox"/> Agent  <input type="checkbox"/> Addressee</p>
<p>1. Article Addressed to:</p> <p>Ms. Karen Sheffield, General Manager          Big Bend Station          Tampa Electric Company          Post Office Box 111          Tampa, Florida 33601-0111</p>	<p>B. Received by, (Printed Name) _____          C. Date of Delivery _____</p>
<p>2. Article Number          (Transfer from service label)</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No          If YES, enter delivery address below:</p>
<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail    <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered        <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail        <input type="checkbox"/> C.O.D.</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
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