

# Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000 August 29, 2001

David B. Struhs Secretary

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Darryl Scott General Manager – Big Bend Station Tampa Electric Company PO Box 111 Tampa, FL 33601-0111

Re: Big Bend Station DRAFT Permit No. 0570039-012-AC including modification to PSD-FL-040

Dear Mr. Scott:

Enclosed is one copy of the Draft Air Construction Permit to allow the firing of coal residual in Boiler Units No. 1-4, and construction of a coal residual storage and handling system at the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County. The Technical Evaluation and Preliminary Determination, the Department's Intent to Issue Air Construction Permit and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" are also included.

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 7 (seven) 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.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Scott Sheplak, P.E., Administrator, Title V Section, MS 5505, at the above letterhead address. If you have any questions, please contact Ms. Cindy Phillips, P.E., at 850/921-9534.

Sincerely,

C. H. Fancy, P.E., Chief, Bureau of Air Regulation

CHF/CLP

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an Application for Permit by:

Tampa Electric Company PO Box 111 Tampa, Florida 33601-0111 DRAFT Permit No.: 0570039-012-AC Big Bend Station Coal Residual Firing in Boiler Units 1 – 4 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 DRAFT Permit attached) for the Big Bend Station, detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Tampa Electric Company applied on May 11, 2001, to the Department for an air construction permit to allow the firing of coal residual in Boiler Units No. 1-4, and construction of a coal residual storage and handling system, at the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County

The Department 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 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required for this action. 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 62-103.150, 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),

The Department will issue the final permit with the attached conditions 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 Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings 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.

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.

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. Mediation is not available in this proceeding. 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.

C. H. Fancy, P.E., 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 before the close of business on [30] to the person(s) listed:

Darryl Scott, Tampa Electric Co.\*
Shannon Todd, Tampa Electric Co.
Thomas W. Davis, P.E.
Gregg Worley, EPA Region 4
Bill Thomas, DEP SWD
Buck Oven, DEP Siting Coordination Office
Alice Harman, EPCHC
Cheri Jacobs, Tampa Tribune
Josh Zimmer, St. Pete Times
B. J. Lower, SOBAC\*
Ralf Brooks\*
Mary Silverman\*

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)

(Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit No.: 0570039-012-AC
Tampa Electric Company
Big Bend Station
Firing of Coal Residual in Boiler Units No. 1 - 4,
and Construction of a Coal Residual Storage and Handling System
North Ruskin, Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit Tampa Electric Company to allow the firing of coal residual in Boiler Units No. 1 – 4, and construction of a coal residual storage and handling system, at the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County.

A Best Available Control Technology (BACT) determination was not required. This permit revises the fuels specified in PSD-FL-040, the EPA construction permit for Unit No. 4. The applicant's name and address are: Tampa Electric Company, Big Bend Station, PO Box 111, Tampa, Florida 33601-0111.

Tampa Electric Company (TEC) owns and operates four fossil fuel fired steam boiler generating units at its Big Bend Station. TEC has requested approval to combust in Big Bend Boiler Units 1 - 4 coal residual generated at the TEC Polk Power Station in Polk County. Specifically, TEC has requested approval to combust up to a total of 200 tons per day of raw Polk Power Station coal residual and up to 500 tons per day of beneficiated, or refined, Polk Power Station coal residual. This 700 tons per day is approximately 5% of the amount of coal that is fired in one day at the Big Bend Facility. The raw coal residual is a by-product of the gasification of coal at the Polk Power Station. The beneficiated, or refined, coal residual will result from using the Charah process to wash and screen the raw coal residual to remove fines and oversized materials. The Charah process will be installed at the Polk Power Station. TEC plans to construct a storage facility and enclosed conveyor system at Big Bend Station to house and transfer the residual fuel to be fired. Since the residual fuel will be stored in an enclosed facility, and the transfer conveyor will be enclosed, fugitive particulate emissions associated with the storage and handling of this material will be minimized.

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 and requests for public meetings concerning the proposed DRAFT Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 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. Mediation is not available in this proceeding.

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 of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions 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, 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, 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 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 Dept. of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114

Fax: 850/922-6979

Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100

Fax: 813/744-6458

**Environmental Protection Commission** of Hillsborough County

1410 North 21 Street Tampa, Florida 33605 Telephone: 813/272-5530 Fax: 813/272-5605

The complete project file includes the application, technical evaluation, 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 Administrator, Title V Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

## 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:

Mr. Darryl Scott General Manager Big Bend Station

## 1.2 Reviewing and Process Schedule

05-11-01:

Date of receipt of request at FDEP Bureau of Air Regulation

06-11-01:

Request for additional information

06-29-01

Application deemed complete

08-xx-01:

Issued intent

#### 2.0 FACILITY INFORMATION

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

#### 2.2 Standard Industrial Classification Code (SIC)

Major Group No.

49 Elect

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.

Unit No. 1 is a fossil fuel fired steam boiler generating unit rated at 4037 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal or a coal/petroleum coke blend consisting of a maximum of 20.0 percent petroleum coke by weight. Unit No. 1 began commercial operation in 1970.

Unit No. 2 is a fossil fuel fired steam boiler generating unit rated at 3996 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal or a coal/petroleum coke blend consisting of a maximum of 20.0 percent petroleum coke by weight. Unit No. 2 began commercial operation in 1973.

Unit No. 1 and Unit No. 2 share two common stacks (Stacks CS001 and CS0W1). Particulate emissions generated during the operation of the units are controlled by dry electrostatic precipitators (ESPs) manufactured by Western Precipitator Division, Joy Manufacturing Corporation. ESP control efficiency is 99.7%. Whenever either unit is fired with petcoke in any amount up to the allowable ratio (20% petcoke/80% coal, by wt.), its flue gases must be directed from its ESP to the FGD system and then to stack CS0W1. Otherwise, if petcoke is not fired, the flue gases may bypass the FGD system and stack CS0W1, and the flue gases are routed from the ESP directly to stack CS001.

## 2.3 Existing Facility/Emission Unit Description (cont'd)

Unit No. 3 is a fossil fuel fired steam boiler generating unit rated at 4115 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal or a coal/petroleum coke blend consisting of a maximum of 20.0 percent petroleum coke by weight. Operation of this unit may include diverting all of the flue gas into the existing Big Bend Unit No. 4 flue gas desulfurization (FGD) system for sulfur dioxide emission reduction. Sulfur dioxide emissions that are generated and not diverted through the Unit No. 4 FGD system are uncontrolled. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Research-Cottrell, Inc. The ESP control efficiency is 99.7%. Unit No. 3 began commercial operation in 1976.

Unit No. 4 is a 4330 MMBTU/hour, dry-bottom tangentially fired utility boiler, SCC 1-01-002-12. The generator nameplate capacity is 486 MW. Unit No. 4 began commercial operation in 1985. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Belco. The control efficiency of the ESP is 99.7%. Sulfur dioxide emissions are controlled by flue gas desulfurization equipment manufactured by Research-Cottrell.

As an option, Unit No. 3 exhaust gas, following particulate matter removal by the unit's ESP, can be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In this integrated mode, Unit No. 3 meets the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber continues to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, is split and discharged through stacks CS002 and CS003. Stack CS003 does not include a recirculation duct to return exhaust gas to the inlet of the FGD scrubber. Continuous opacity monitoring systems (COMS) are located at the outlet of Unit No. 3 and Unit No. 4 ESPs. Continuous SO<sub>2</sub>, CO<sub>2</sub>, and NOx emissions monitoring systems (CEMS) are located in stacks CS002 and CS003. These monitoring systems are used to determine compliance with all current applicable requirements.

#### 2.4 Regulatory Classification

The facility is classified as a major Title V source of air pollution because emissions of at least one regulated air pollutant, such as sulfur dioxide, exceed 100 tons per year.

#### 3. PERMITTING STATUS

Boiler Unit No. 4 was previously issued a PSD air construction permit. Boiler Units No. 1 - 4 are included in the current Title V operation permit. Currently permitted fuels are coal, coal/petroleum coke blend, and No. 2 fuel oil.

#### 4. PRESENT APPLICATION AND DEPARTMENT PROPOSED ACTIONS

Tampa Electric Company (TEC) has requested approval to combust in Big Bend Boiler Units 1 - 4 coal residual generated at the TEC Polk Power Station. Specifically, TEC has requested approval to combust up to a total of 200 tons per day of raw Polk Power Station coal residual and up to 500 tons per day of beneficiated, or refined, Polk Power Station coal residual. This 700 tons per day is approximately 5% of the amount of coal that is fired in one day at the Big Bend Facility. The raw coal residual is a by-product of the gasification of coal at the Polk Power Station. The beneficiated, or refined, coal residual will result from using the Charah process to wash and screen the raw coal residual to remove fines and oversized materials. The Charah process will be installed at the Polk Power Station. TEC plans to construct a storage facility and enclosed conveyor system at Big Bend Station to house and transfer residual fuel to be fired. Since the residual fuel will be stored in an enclosed facility, and the transfer conveyor will be enclosed, fugitive particulate emissions associated with the storage and handling of this material will be

minimized. This should resolve the previous problem of fugitive particulate emissions from the open stockpile of raw coal residual.

Prior to firing coal residual, TEC shall develop and submit for FDEP approval a testing protocol for evaluating the effect that firing coal residual will have on  $NO_x$  and CO emissions. Since Steam Generator Units No. 1, 2, and 3 are similar units in configuration and technology, one of these three units may be tested for  $NO_x$  and CO with the assumption that NOx and CO emissions are effected in the same manner for the other two units. Because Steam Generator Unit No. 4 has a different configuration and technology, TEC shall also perform emissions testing on this unit to evaluate the effect that firing the residual coal has on emissions of  $NO_x$  and CO.

In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed annual emissions caps of 71,810 tons per year of  $SO_2$  and 2,767 tons per year of  $PM/PM_{10}$ . These caps correspond to the average emissions of the years 1999 and 2000.

## 5. PROJECTED EFFECTS OF IMPLEMENTING THE CONSENT DECREE AND THE CONSENT FINAL JUDGMENT AT BIG BEND STATION

In keeping with the Florida Department of Environmental Protection's Consent Final Judgment and the Environmental Protection Agency's Consent Decree, Tampa Electric Company will achieve large reductions in emissions of oxides of nitrogen (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM) from Big Bend Station. Work on achieving these emissions reductions has already commenced through the implementation of several early reduction programs. Details of the emissions reductions from Big Bend Station are described below:

#### Particulate Matter Reductions

To reduce emissions of particulate matter from Big Bend Station, Tampa Electric Company (TEC) is required to undertake a three tiered study in which the Company will:

- 1. Evaluate the Best Operational Practices that can be applied to the existing equipment;
- 2. Investigate BACT level upgrades and modifications that can be undertaken on the existing equipment to reduce emissions of particulate matter;
- Once the BACT level upgrades are implemented (estimated to be between May 1, 2003 and May 1, 2004), revisit the Best Operational Practices study and modify it as it applies to the upgrades and modifications.

To date, TEC has contracted with the Electric Power Research Institute (EPRI), the Southern Research Institute (SRI), and Grady Nichols Enterprises. The first Best Operational Practices plan and the BACT evaluation are already well underway. In addition, TEC has strategically taken advantage of unit outages to modify the flue gas flow both to and within some of the Electrostatic Precipitators (ESPs) in an effort to achieve early reductions in particulate matter emissions. At the end of the program (estimated to be 2006), TEC estimates that particulate matter emissions will be reduced by approximately 1,250 tons per year or 40% when compared to 1998 levels.

### Oxides of Nitrogen Reductions

 $NO_x$  emissions will be reduced from Big Bend Station through the implementation of near term projects, and through the later installation of one or more selective catalytic reduction (SCR) systems, the repowering of one or more Big Bend Units, or the shutdown of one or more Big Bend Units. Depending on the control technology chosen for each unit, each decision must be implemented by May 1, 2007, May 1, 2008, May 1, 2009, and May 1, 2010.

Thus far, TEC has modified the burners and coal nozzles serving Unit 1, and installed a neural network on Unit 2. Each of these projects has the goal of reducing NO<sub>x</sub> emissions by up to 30% below 1998 levels. Based on the results of these projects, TEC may:

- 1. Install a neural network on Unit 1;
- 2. Modify the burners serving Unit 2:
- 3. Implement one of the above projects, both of the above projects or another project on Unit 3; or
- 4. Implement one of the above projects, both of the above projects or another project on Unit 4.

By the end of the program (May 1, 2010), TEC expects NO<sub>x</sub> emissions from Big Bend Station to be reduced by approximately 30,400 tons per year, or almost 90% when compared to 1998 levels.

#### Sulfur Dioxide Reductions

Emissions of SO<sub>2</sub> from Big Bend Station will be reduced from Big Bend Station through:

- 1. The installation, operation and optimization of a scrubber system serving Units 1 and 2;
- 2. The optimization of the scrubber system serving Units 3 and 4.

On January 1, 2000, the scrubber system serving Big Bend Units 1 and 2 began commercial operation. During 2000 and 2001, TEC has spent or will spend approximately \$23 million to upgrade and optimize the scrubber systems serving Big Bend Units 1 through 4. These optimization projects will eventually allow TEC to maintain a removal efficiency of 95% and an availability of 95% for the scrubber systems at Big Bend Station. Much of the optimization work related to the scrubber systems at Big Bend Station will occur by 2003, and the program will continue until January 1, 2013.

By January 1, 2013, TEC estimates that emissions of SO<sub>2</sub> from Big Bend Station will be reduced by approximately 92,000 tons per year, or approximately 90% when compared to 1998 levels.

#### 6. CONCLUSION

The conditions agreed to by the Department provide reasonable assurance that there will be no significant increase in the representative actual annual emissions of any regulated pollutant.

### - DRAFT-

#### PERMITTEE:

Tampa Electric Company Big Bend Station PO Box 111 Tampa, Florida 33601-0111

Permit No. 0570039-012-AC

Project: Firing of Coal Residual in

Boiler Units No. 1 – 4 and Construction of a Coal Residual Storage and

Handling System

SIC: 4911

Expires: August 31, 2002

Authorized Representative:
Darryl Scott
General Manager – Big Bend Station

## PROJECT AND LOCATION:

Air construction permit to allow the firing of coal residual in Boiler Units No. 1 - 4, and construction of a coal residual storage and handling system, at the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County. UTM coordinates are Zone 17; 361.9 km E; 3075.0 km N.

#### 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 construct/operate 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).

## Attached appendices made a part of this permit:

Appendix GC Construction Permit General Conditions

Howard L. Rhodes, Director Division of Air Resources Management

#### **SECTION I - FACILITY INFORMATION**

## **FACILITY DESCRIPTION**

This facility is an electric utility.

Unit No. 1 is a fossil fuel fired steam boiler generating unit rated at 4037 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal or a coal/petroleum coke blend consisting of a maximum of 20.0 percent petroleum coke by weight. Unit No. 1 began commercial operation in 1970.

Unit No. 2 is a fossil fuel fired steam boiler generating unit rated at 3996 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal or a coal/petroleum coke blend consisting of a maximum of 20.0 percent petroleum coke by weight. Unit No. 2 began commercial operation in 1973.

Unit No. 1 and Unit No. 2 share two common stacks (Stacks CS001 and CS0W1). Particulate emissions generated during the operation of the units are controlled by dry electrostatic precipitators (ESPs) manufactured by Western Precipitator Division, Joy Manufacturing Corporation. ESP control efficiency is 99.7%. Whenever either unit is fired with petcoke in any amount up to the allowable ratio (20% petcoke/80% coal, by wt.), its flue gases must be directed from its ESP to the FGD system and then to stack CS0W1. Otherwise, if petcoke is not fired, the flue gases may bypass the FGD system and stack CS0W1, and the flue gases are routed from the ESP directly to stack CS001.

Unit No. 3 is a fossil fuel fired steam boiler generating unit rated at 4115 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal or a coal/petroleum coke blend consisting of a maximum of 20.0 percent petroleum coke by weight. Operation of this unit may include diverting all of the flue gas into the existing Big Bend Unit No. 4 flue gas desulfurization (FGD) system for sulfur dioxide emission reduction. Sulfur dioxide emissions that are generated and not diverted through the Unit No. 4 FGD system are uncontrolled. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Research-Cottrell, Inc. The ESP control efficiency is 99.7%. Unit No. 3 began commercial operation in 1976.

Unit No. 4 is a 4330 MMBTU/hour, dry-bottom tangentially fired utility boiler, SCC 1-01-002-12. The generator nameplate capacity is 486 MW. Unit No. 4 began commercial operation in 1985. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Belco. The control efficiency of the ESP is 99.7%. Sulfur dioxide emissions are controlled by flue gas desulfurization equipment manufactured by Research-Cottrell.

As an option, Unit No. 3 exhaust gas, following particulate matter removal by the unit's ESP, can be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In this integrated mode, Unit No. 3 meets the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber continues to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, is split and discharged through stacks CS002 and CS003. Stack CS003 does not include a recirculation duct to return exhaust gas to the inlet of the FGD scrubber. Continuous opacity monitoring systems (COMS) are located at the outlet of Unit No. 3 and Unit No. 4 ESPs. Continuous SO<sub>2</sub>, CO<sub>2</sub>, and NOx emissions monitoring systems (CEMS) are located in stacks CS002 and CS003. These monitoring systems are used to determine compliance with all current applicable requirements.

The purpose of this permit is to allow Tampa Electric Company (TEC) to combust in Big Bend Boiler Units 1 - 4 residual coal generated at the TEC Polk Power Station. Specifically, this permit allows the combustion of up to a total of 200 tons per day of raw Polk Power Station coal residual and up to 500 tons per day of beneficiated, or refined, Polk Power Station coal residual. This 700 tons per day is approximately 5% of the amount of coal that is fired in one day at the Big Bend Facility. The raw coal residual is a by-product of the gasification of coal at the Polk Power Station. The beneficiated, or refined, coal residual will result from using the Charah process to wash and screen the raw coal residual to remove fines and oversized materials. The Charah process will be installed at the Polk Power Station. TEC plans to construct a storage facility and enclosed conveyor system at Big Bend Station to house and transfer residual fuel to be fired. Since the residual

fuel will be stored in an enclosed facility, and the transfer conveyor will be enclosed, fugitive particulate emissions associated with the storage and handling of this material will be minimized. This should resolve the previous problem of fugitive particulate emissions from the open stockpile of raw coal residual.

#### **EMISSIONS UNITS**

This permit addresses the following emissions units:

EMISSION		
Unit No.	EMISSION UNIT DESCRIPTION	
001	Unit No. 1 Steam Generator	
002	Unit No. 2 Steam Generator	
003	Unit No. 3 Steam Generator	
004	Unit No. 4 Steam Generator	
037	Coal Residual Storage Facility	
038	Coal Residual Transfer System	

## **REGULATORY CLASSIFICATION**

This facility is classified as a "Major Source of Air Pollution or Title V Source" due to emissions of at least one regulated air pollutant, such as sulfur dioxide, that exceeds 100 tons per year.

## PERMIT SCHEDULE/RELEVANT DOCUMENTS

- Application received May 11, 2001
- Request for additional information June 11, 2001
- Additional information received June 29, 2001
- Application complete June 29, 2001
- Intent to Issue and Public Notice Package Mailed xxx-xx, 2001
- Proof of Publication Received xxx-xx-2001
- Final Permit Issued xxx-xx-2001

Tampa Electric Company, Big Bend Station Permit No. 0570039-012-AC

#### SECTION II – FACILITY-WIDE SPECIFIC CONDITIONS

The following specific conditions apply to all emissions units at this facility addressed by this permit:

- 1. <u>Permitting Authority:</u> All documents related to applications for permits to construct or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-0114.
- 2. <u>Compliance Authority:</u> All documents related to operation, reports, tests, and notifications should be submitted to the

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

3. <u>General Conditions</u>: 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.]

- 4. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- 5. 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.]
- 6. 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.]
- 7. 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.]
- 8. Completion of Construction: The permit expiration date is August 31, 2002. Physical construction shall be complete by June 30, 2002. The additional time provides for testing, submittal of results, and submittal of the Title V permit to the Department.
- 9. <u>Permit Expiration Date Extension</u>: The permittee, for good cause, may request that this 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.).
- 10. <u>Application for Title V Permit Revision</u>: An application for a revision to the Title V operating permit for this facility must be must be submitted to the Department's Bureau of Air Regulation. [Chapter 62-213, F.A.C.]

Tampa Electric Company, Big Bend Station Permit No. 0570039-012-AC

- 11. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 12. 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 plant operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
- 13. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without the applicable air control device operating properly. [Rule 62-210.650, F.A.C.]
- 14. <u>Unconfined Particulate Matter Emissions</u>: 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.]
- 15. <u>Test Notification</u>: The permittee shall notify each Compliance Authority in writing at least 30 days prior to any initial performance tests and at least 15 days prior to any other required tests. Notification shall include the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and conducting the test. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.7, 60.8]
- 16. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

## 17. Applicable Test Procedures

- a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)1. and 2., F.A.C.]
- b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]
- c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]

## 18. Determination of Process Variables

- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]
- b. Accuracy of Equipment Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to

- allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]
- 19. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 20. <u>Stack Testing Facilities</u>: Required stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rule 62-297.310]
- 21. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2)(b), F.A.C.]
- 22. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
- 23. Emissions Performance Test Results Reports: A report indicating the results of any required emissions performance test shall be submitted to each Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
- 24. <u>Annual Operating Reports</u>: The permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the Environmental Protection Commission of Hillsborough County by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

Tampa Electric Company, Big Bend Station Permit No. 0570039-012-AC

### SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

The following emission units are subject to the specific conditions listed in this section:

EMISSIONS	
UNIT NO.	EMISSION UNIT DESCRIPTION
001	Unit No. 1 Steam Generator
002	Unit No. 2 Steam Generator
003	Unit No. 3 Steam Generator
004	Unit No. 4 Steam Generator

## **OPERATIONAL REQUIREMENTS**

- 1. Fuel fired shall consist of coal, or a coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight, or coal and petcoke blended with coal residual generated from the Polk Power Station. In any case, the petcoke content of any fuel blend shall not exceed 20% by weight. The vanadium content in the petroleum coke fired shall not exceed 2,660 ppm vanadium. The ash content of the petroleum coke fired shall not exceed 0.76% by weight on a dry basis. This specific condition modifies Specific Condition 1.A. of construction permit PSD-FL-040 for Unit No. 4 Steam Generator.
- 2. Firing of beneficiated, or refined, coal residual at Big Bend Station is limited to 500 tons per day. The beneficiated, or refined, coal residual results from using the Charah process to wash and screen the raw coal residual to remove fines and oversized materials. The Charah process will be installed at the Polk Power Station.
- 3. Firing of raw residual coal at Big Bend Station is limited to 200 tons per day. The raw coal residual is a by-product of the gasification of coal at the Polk Power Station. At the time of this permit issuance, there are approximately 100,000 tons of raw coal residual stored at Polk Power Station. Once this raw coal residual pile has been fired, TEC shall only fire raw coal residual in the event of a significant Charah beneficiation process malfunction.

#### MONITORING AND TESTING REQUIREMENTS

4. Prior to firing coal residual, TEC shall develop and submit for FDEP approval a testing protocol for evaluating the effect that firing coal residual will have on NO<sub>x</sub> and CO emissions. Since Steam Generator Units No. 1, 2, and 3 are similar units in configuration and technology, one of these three units may be tested for NO<sub>x</sub> and CO with the assumption that NOx and CO emissions are effected in the same manner for the other two units. Because Steam Generator Unit No. 4 has a different configuration and technology, TEC shall also perform emissions testing on this unit to evaluate the effect that firing the residual coal has on emissions of NO<sub>x</sub> and CO.

#### **EMISSIONS LIMITATIONS**

5. In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed annual emissions caps of 71,810 tons per year of  $SO_2$  and 2,767 tons per year of  $PM/PM_{10}$ . These caps correspond to the average emissions of the years 1999 and 2000.

## OTHER RULE REQUIREMENTS

6. This permit is issued in accordance with Rule 62.212.300, F.A.C., General Preconstruction Review. This facility is presently exempt from PSD review because of restrictions on SO<sub>2</sub> and PM/PM<sub>10</sub> emissions. Any relaxation in these limits that increases the facility's potential to emit by at least 1 ton of pollutant per year will result in a reevaluation of PSD applicability for the facility as though construction had not yet commenced on the facility [Rule 62-212.400(2)(g)].

The following emission units are subject to the specific conditions listed in this section:

EMISSIONS UNIT NO.	EMISSION UNIT DESCRIPTION
037	Coal Residual Storage Facility
038	Coal Residual Transfer System

## **EMISSION LIMITATIONS**

- 7. Visible emissions shall not exceed 5% opacity in lieu of particulate sampling. [Rule 62-297.620(4), F.A.C.]
- 8. All conveyors and conveyor transfer points shall be enclosed to minimize particulate matter emissions.

#### TEST METHODS AND COMPLIANCE PROCEDURES

- 9. Tampa Electric shall perform an annual VE test to satisfy the periodic monitoring requirements.
- 10. Compliance with the allowable visible emissions limitation shall be determined by using the following reference method as described in 40 CFR 60, Appendix A, adopted by reference in Chapter 62-204, F.A.C.:
  - Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources.

## APPENDIX GC GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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

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

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

## APPENDIX GC GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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

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



## Sheplak, Scott

-file .

From: Brown,

Brown, Louis [LBrown@ouc.com]

Sent:

Tuesday, May 16, 2006 3:00 PM

To:

Sheplak, Scott

Cc:

sosbourn@golder.com

Subject: RE: Unit I Burner Replacement Project - 0950137-009-AC

Scott.

I am forwarding the raw CEM data, which shows Stanton's Unit 1 SO2, NOx and opacity emissions for the period 3/20/06 through 5/20/06. It is in the attached Excel spreadsheet.

Unit 1's permit limits are as follows:

SO2 - 1.2 lb/MMBtu (30 day rolling average), or 1.2 lb/MMBtu/hr (2 hour emission rate)

Opacity - Shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour not to exceed 27% opacity

NOx - NOx emissions shall not exceed 0.60 lb/MMBtu heat input (30-day rolling average), nor 0.46 lb/MMBtu heat input on an annual average.

A comparison of the CEM data to the permit limits indicates that the unit is in compliance with the specific emission limits in Permit No. 0950137-006-AV.

We are in the process of compiling this data into a more formal report to the Department. I did, however want to submit the raw data for your initial review, prior to the May 20, 2006 deadline.

Please let me know if you have any immediate questions and comments, and our thanks for your assistance to date.

Louis

----Original Message----

From: Sheplak, Scott [mailto:Scott.Sheplak@dep.state.fl.us]

**Sent:** Monday, April 10, 2006 9:52 AM

**To:** Osbourn, Scott **Cc:** Brown, Louis

Subject: RE: Unit I Burner Replacement Project - 0950137-009-AC

The key is to compare the before and after data based on the averging times of the standards. SO2 and NOx have a 30 day rolling average. So a minumum period of 30 days is required.

----Original Message-----

From: Osbourn, Scott [mailto:Scott\_Osbourn@golder.com]

Sent: Monday, April 03, 2006 12:20 PM

To: Sheplak, Scott Cc: Brown, Louis

Subject: RE: Unit I Burner Replacement Project - 0950137-009-AC

Thanks for the response Scott. I understand that the study period commences the day the unit went back online. Our question is, what is the end of the study period? The permit condition says to submit the study report within 60 days of the unit coming back online. We'd like to suggest that the study period be 30 days. That would then give us another 30 days to compile the data into a report to meet the 60 day requirement.

Scott Osbourn, P.E.

Golder Associates Inc 5100 West Lemon St., Suite 114 Tampa, FL 33609

Tel: (813) 287-1717 Fax: (813) 287-1716

E-mail: sosbourn@golder.com

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From: Sheplak, Scott [mailto:Scott.Sheplak@dep.state.fl.us]

Sent: Friday, March 31, 2006 2:30 PM

**To:** Osbourn, Scott **Cc:** Linero, Alvaro

Subject: FW: Unit I Burner Replacement Project - 0950137-009-AC

#### Scott,

The period in which emissions are to be evaluated is from the date the unit went back online (March 20, 2006). This is the date the project was completed and the unit began operation with the new burners. Scott

----Original Message-----From: Linero, Alvaro

Sent: Monday, March 27, 2006 3:54 PM

To: Sheplak, Scott

Subject: RV: Unit I Burner Replacement Project - 0950137-009-AC

Scott:

Please get back with S. Osbourn

----Mensaje original----

De: Osbourn, Scott [mailto:Scott Osbourn@golder.com]

Enviado el: lun 27/03/2006 15:21 Para: Brown, Louis; Linero, Alvaro

CC

Asunto: RE: Unit I Burner Replacement Project - 0950137-009-AC

In addition to Louis' notification below, we were wondering about the requirement in Condition 5 of the construction permit. Specifically, it mentions a report to be submitted within 60 days of completion of this "project". Our question is, what is the study period? Should we assume a 30 day period, from the date back online (3/20) to 4/20/06? That way we'd have 30 days to put the report together and be able to meet the 60 day requirement. Please confirm that this is your understanding.

Scott Osbourn, P.E. Golder Associates Inc 5100 West Lemon St., Suite 114 Tampa, FL 33609

Tel: (813) 287-1717 Fax: (813) 287-1716

E-mail: sosbourn@golder.com

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----Original Message----

From: Brown, Louis [mailto:LBrown@ouc.com]

Sent: Monday, March 27, 2006 3:13 PM To: Alvaro.Linero@dep.state.fl.us

Cc: Osbourn, Scott

Subject: Unit I Burner Replacement Project - 0950137-009-AC

Mr. Linero,

Please consider this as notification that the subject project has been concluded.

Unit 1 went back on line on March 20, 2006.

The general schedule for bring the unit back on line is attached below.

Please let me know if any additional information is needed.

Thank you.

Louis Brown

<< Spring 2006 Unit 1 Turnover schedule.xls>>