



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT  
7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33610

REUBIN O'D. ASKEW  
GOVERNOR

September 27, 1978  
Tampa Electric Company  
HILLSBOROUGH COUNTY - - A.P.

JOSEPH W. LANDERS, JR.  
SECRETARY

P. David Puchaty  
District Manager

Alex Kaiser, Director  
Power Plant Engineering  
Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601

Dear Mr. Kaiser:

Pursuant to Section 403.061(16), Florida Statutes, your application has been approved by the Department and, therefore, we are issuing to you the enclosed permit no. A029-7102 which will expire on July 1, 1983

This permit is not effective unless you accept it, including any and all of the conditions contained therein. If you do not choose to accept it, you must file an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes.

A petition for a hearing must comply with the requirements of Florida Administrative Code, Section 28-5.15 and be filed (postmarked) with the Secretary of the Department of Environmental Regulation at Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301, with a copy to this office within fourteen (14) days from receipt of this letter. Petitions which are not filed in accordance with the above provisions may be subject to dismissal.

Any time limits imposed in the permit are a condition to this permit and are enforceable under Section 403.061, Florida Statutes. You are hereby placed on notice that the Department will review this permit to check for compliance and will initiate enforcement action for violations of the conditions and requirements of this permit.

Your continued cooperation in this matter is appreciated. Please refer to your assigned permit number in all future communications.

Sincerely,

cc: Central Files

HCEPC  
Enclosures

Bernard D. Kitching, P.E.

*for* R. Craig McArthur  
P. David Puchaty  
District Manager

RULES OF THE ADMINISTRATION COMMISSION  
MODEL RULES OF PROCEDURE  
CHAPTER 28-5  
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners;
  - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
  - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
  - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
  - (f) A demand for the relief to which the petitioner deems himself entitled; and,
  - (g) Such other information which the petitioner contends is material.

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NOTE: At a formal hearing all parties shall have an opportunity to present evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of fact and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel.

XXXXXXXXXX

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

HILLSBOROUGH COUNTY

## OPERATION PERMIT

FOR TAMPA ELECTRIC COMPANY

P. O. BOX 111

TAMPA, FLORIDA 33601

PERMIT NO. A029-7102

DATE OF ISSUE September 27, 1978

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403 FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO ALEX KAISER, DIRECTOR - POWER PLANT ENGINEERING AND ENVIRONMENTAL PLANNING

FOR THE OPERATION OF THE FOLLOWING  
GANNON STATION NO. 35 STEAM GENERATOR WITH AN ELECTROSTATIC PRECIPITATOR  
SUBJECT TO ATTACHED CONDITIONS OF APPROVAL NOS. 1, 2, 3, 5, 6.

LOCATED AT PORT SUTTON ROAD, TAMPA

UTM: 360.00E - 3087.50N

IN ACCORDANCE WITH THE APPLICATION DATED 6/23/78

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN. FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL JULY 1, 1983

OR UNLESS REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

*Don A. Williams*  
DISTRICT ENGINEER

*Joseph W. Landers, Jr.*  
JOSEPH W. LANDERS, JR.  
SECRETARY

*Roger P. Stewart*  
ROGER P. STEWART, DIRECTOR  
HILLS. CTY. ENV. PROTECTION COMM.

*P. David Puchaty*  
DISTRICT MANAGER  
P. David Puchaty

JG Replaces A029-5630

1018000520C4005

State of Florida  
Department of Environmental Regulation

OPERATION PERMIT CONDITIONS  
FOR AIR POLLUTION SOURCES

Permit No.: A029-7102

Date: 9/27/78

An (X) indicates applicable conditions

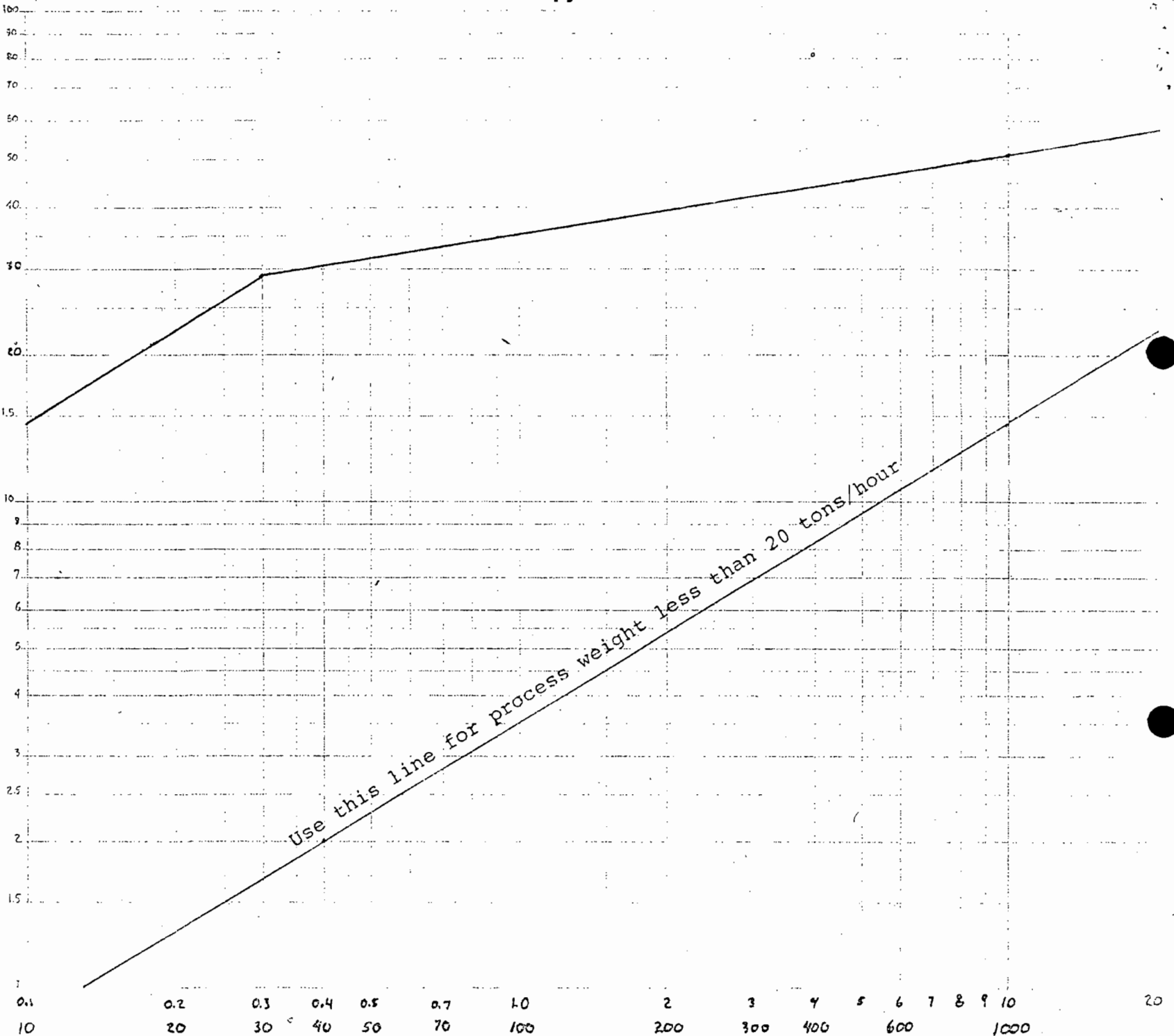
- (X) 1. The permit holder must comply with Florida Statute, Chapter 403 and the applicable Chapters of the Department of Environmental Regulation in addition to the conditions of this permit (Chapter 403.161(1)(b), Florida Statutes).
- (X) 2. Test the emissions for the following pollutant(s) at intervals of EIGHT MONTHS from the date March, 1978 and submit a copy of test data to the District Engineer of this agency within fifteen days of such testing (Chapter 17-2.07(1), Florida Administrative Code (F.A.C.)).  

(X) Particulates	(X) Sulfur Oxides
( ) Fluorides	( ) Nitrogen Oxides
(X) Plume Density	( ) Hydrocarbons

\*Fuel Analysis will be accepted ) Total Reduced Sulfur in lieu of stack analysis for SO<sup>2</sup>
- (X) 3. Testing of emissions must be accomplished at approximately the rates as stated in the application. Failure to submit the input rates or operation at conditions which do not reflect actual operating conditions may invalidate the data (Chapter 403.161(1)(c), Florida Statutes).
- ( ) 4. Submit for this source quarterly reports showing the type and monthly quantities of fuels used in the operation of this source. Also state the sulfur content of each fuel (Chapter 17-4.14, F.A.C.).
- (X) 5. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information as per Chapter 17-4.14, F.A.C.
  - (A) Annual amount of materials and/or fuels utilized.
  - (B) Annual emissions (note calculation basis).
  - (C) Any changes in the information contained in the permit application.

- (X) 6. In the event the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall immediately notify the District Office of the D.E.R. as per Chapter 17-4.13, F.A.C. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement actions by the Department.
- ( ) 7. According to the Process Weight Table within Chapter 17-2.04(2), F.A.C., the maximum allowable emission rate of particulate matter for a process rate of \_\_\_\_\_ tons/hour is \_\_\_\_\_ pounds/hour. At lesser process rates, the allowable emission rates can be determined from the graph.
- ( ) 8. This permit is associated with a Development of Regional Impact (D.R.I.). It does not waive any other permits that may be required from this or any other state, federal, or local agency.

POUNDS OF PARTICULATES



PROCESS WEIGHT TABLE

PROCESS WEIGHT TONS/HOUR

DER PERMIT APPLICATION TRACKING SYSTEM MASTER RECORD

FILE#0000000012436 COE# DER PROCESSOR: BROWN DER OFFICE: TPA  
 FILE NAME: ALEX KAISER DATE FIRST REC: 08/14/78 APPLICATION TYPE: AD  
 APPL NAME: TECO - 7402 APPL PHONE: (813)879-4111 PROJECT COUNTY: 29  
 ADDR: P.O. BOX 111 CITY: TAMPA ST: FL ZIP: 33601  
 AGNT NAME: BERNARD D. KITCHING AGNT PHONE: (813)879-4111  
 ADDR: P.O. BOX 111 CITY: TAMPA ST: FL ZIP: 33601

ADDITIONAL INFO REC: / / / / / REC: / / / / /  
 APPL COMPLETE DATE: 09/08/78 COMMENTS REC: N DATE REC: / / DATE REC: / /  
 LETTER OF INTENT REC: Y DATE WHEN INTENT ISSUED: / / WAIVER DATE: / /

HEARING REQUEST DATES: / / / / /  
 HEARING WITHDRAWN/DENIED/ORDER -- DATES: / / / / /  
 HEARING ORDER OR FINAL ACTION DUE DATE: / / MANUAL TRACKING DESIRED: N

RECORD HAS BEEN SUCCESSFULLY UPDATED

FEE PD DATE#1: 08/14/78 \$0020 RECEIPT#000023730 REFUND DATE: / / REFUND \$  
 FEE PD DATE#2: / / \$ RECEIPT# REFUND DATE: / / REFUND \$  
 APPL: ACTIVE/INACTIVE/DENIED/WITHDRAWN/TRANSFERRED/EXEMPT/ISSUED: IS DATE: 09/27/78  
 REMARKS: A029-7402 - (GANNON DS)

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee	
To: _____	Loctn.: _____
To: _____	Loctn.: _____
To: _____	Loctn.: _____
From: _____	Date: _____

TO: P. David Puchaty

THRU: Dan A. Williams *EDW*

FROM: William H. Brown, II *WJB*

DATE: September 15, 1978

SUBJECT: TECO - Gannon #5

*AD29-7102*

This unit is a 2284 MMBTU/hr. steam boiler using coal, this coal has 1.3% sulfur. The emission rate from this unit is 4600 lb/hr. SO<sub>2</sub>, 49 lb/hr., TSP, allowable is 5904 lb/hr. SO<sub>2</sub>, 246 lb/hr. TSP.

These are in compliance with state regulations.

Please see Griffiths reason for a reduced term permit.

I concur and recommend this permit be approved.

WHB/ftb





BEST AVAILABLE COPY  
STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT  
7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33610  
September 13, 1977  
TAMPA ELECTRIC COMPANY  
HILLSBOROUGH COUNTY - - A.P.

REUBEN O.O. ASKEW  
GOVERNOR

JOSEPH W. LANGERS, JR.  
SECRETARY

MR. ALEX KAISER, DIRECTOR  
POWER PLANT ENGINEERING  
TAMPA ELECTRIC COMPANY  
P. O. BOX 111  
TAMPA, FLORIDA 33601

Dear Mr. Kaiser:

Pursuant to your recent application, please find enclosed a permit (No. AO29-5630 ) dated September 13, 1977 to ~~construct~~/operate the subject pollution source.

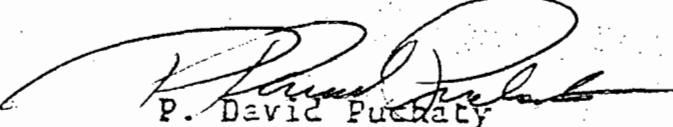
This permit will expire on 7/31/78 , and will be subject to the conditions, requirements, and restrictions checked or indicated otherwise in the attached sheet ~~XXXXXX/XXXXXX~~ "Operation Permit Conditions".

This permit is issued under the authority of Florida Statute 405.051(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 405.161. You are hereby placed on Notice that the department will review this permit before the scheduled date of expiry and will seek court action for violation of the conditions and requirements of this permit.

You have ten days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit. Failure to file a written request to review or modify the conditions or requirements contained in this permit shall be deemed a waiver of any objections thereto.

Your continued cooperation in this matter is appreciated and in future communication please refer to your permit number.

Yours very truly,

  
P. David Puchaty  
District Manager  
Southwest District

cc Central Files  
HCEPC

101800052004005

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

## OPERATION PERMIT

FOR TAMPA ELECTRIC COMPANY

P. O. BOX 111

TAMPA, FLORIDA 33601

PERMIT NO. A029-5630

DATE OF ISSUE September 13, 1977

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403, FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO MR. ALEX KAISER, DIRECTOR POWER PLANT ENGINEERING

FOR THE OPERATION OF THE FOLLOWING:

GANNON STATION UNIT NO. 5 STEAM GENERATOR SUBJECT TO ATTACHED CONDITIONS

OF APPROVAL NOS.: 1, 2, 3, 4, 5, 6, 7, 9, 11, 14

LOCATED AT PORT SUTTON ROAD TAMPA

UTM: 17-360.0E - 3087.5N

IN ACCORDANCE WITH THE APPLICATION DATED 7/31/77

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN. FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL 7/31/78

OR UNLESS REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

*[Signature]*  
DISTRICT ENGINEER

*[Signature]*  
JOSEPH W. LANDERS, JR.  
SECRETARY

*[Signature]*  
ROGER P. STEWART, DIRECTOR

*[Signature]*  
DISTRICT MANAGER

HILLS COUNTY ENV. PROTECTION COMMISSION

FOR AIR POLLUTION SOURCES

Permit No.: A029-5630

Date: 9/13/77

- ( ) 1. Fugitive dusts, odors and other pollutants from all sources shall be effectively controlled or eliminated by suitable means. (Chapter 17-2.04 (3)(4)(5) )
- (X) 2. The pollution control equipment shall be maintained and operated in such a manner that all emissions will be in compliance with applicable rules and regulations of the DER. A log of maintenance activities shall be kept and available for DER review. (Chapter 17-2.03 (7) )
- (X) 3. Report any problems encountered in the operation of the source that may result in discharge of pollutants in amounts higher than permitted herein. Cease operation forthwith unless permission has been obtained from the regional office of the DER to operate the source for an interim period. (Chapter 17-4.13)
- (X) 4. This permit is issued on the basis of the data submitted in the application and the existing requirements of this agency as set forth in Chapter 17-2 (revised January 18, 1972) Florida Administrative Code. The owner shall obtain written permission from the DER before making changes in the operation of the source (i.e. higher production rate, different raw materials and fuels, etc.) that may increase the quantity of pollutants or change their composition. (Chapter 17-2.01)
- (X) 5. This permit is not transferable. Upon the sale or legal transfer of the source covered by this permit, the new owner must apply by letter for a transfer of this permit within thirty days. (Chapter 17-4.12)
- (X) 6. Test the emissions for the following pollutant(S) at intervals of ( SIX MONTHS ) from the date of ( 6/1/77 ) and submit a copy of test data to the District Engineer of this agency within fifteen days of such testing. Chapter 17-2.07 (1) Florida Administrative Code (FAC).
- |                   |                          |
|-------------------|--------------------------|
| (X) Particulates  | (X) Sulfur Oxides *      |
| ( ) Fluorides     | ( ) Nitrogen Oxides      |
| (X) Plume Density | ( ) Hydrocarbons         |
|                   | ( ) Total Reduced Sulfur |
- \* Complete fuel analysis of the coal being used in unit 5 must be submitted every three months in lieu of SO<sub>2</sub> stack sampling.
- (X) 7. Provide such sampling and testing facilities as may be necessary for the proper determination of the nature and quantity of air pollutants emitted from this source. (Chapter 17-2.07)
- ( ) 8. Identify the pollution source and/or control equipment by its manufacturer, model number, serial number, capacity, and any other pertinent information. Submit this information on or before
- (X) 9. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information:
- a) Annual amount of materials and/or fuel utilized.
  - b) Annual emissions.
  - c) Any changes in the information contained in the permit application.
- ( ) 10. Submit emissions data on particulates and sulfur dioxide within 30 days of permit.
- (X) 11. Issuance of this permit does not indicate an endorsement or approval of any other required permits by this Department.
- ( ) 12. Incinerators shall comply with the provision of Chapter 17-2.04(6)(a), Florida Administrative Code, and Chapter 1-3.03.VI, A of the Hillsborough County Environmental Protection Commission Rules and Regulations.
- ( ) 13. Incinerators shall not incinerate radioactive materials.

( X ) 14. Boiler operation, including SOOTBLOWING, must be within the limiting standards set forth by DER Rule 17.04 (6) (e) (2) (b) pertaining to visible emissions.



REUBIN OD. ASKEW  
GOVERNOR

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT  
9721 EXECUTIVE CENTER DRIVE, NORTH, SUITE 200  
P.O. BOX 20350  
ST. PETERSBURG, FLORIDA 33742

JOSEPH W. LANDERS, JR.  
SECRETARY

Tampa Electric Company  
Hillsborough County -- A.P.  
October 14, 1976

Mr. Alex Kaiser, Director of  
Power Plant Engineering and Environmental Planning  
Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601

Dear Mr. Kaiser:

Pursuant to your recent application, please find enclosed a permit (No. A029-2486 ) dated 10/14/76 to ~~construct~~ operate the subject pollution source.

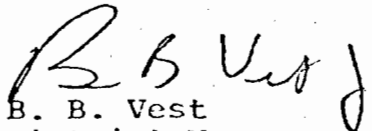
This permit will expire on 7-1-77 , and will be subject to the conditions, requirements and restrictions checked or otherwise indicated in the attached sheet "~~Construction~~/Operation Permit Conditions".

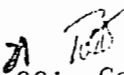
This permit is issued under the authority of Florida Statute 403.061(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 403.161. You are placed on Notice that the Department will review this permit before the scheduled date of expiry and will seek court action for violation of the conditions and requirements of this permit.

You have ten days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit. Failure to file a written request to review or modify the conditions or requirements contained in this permit shall be deemed a waiver of any objections thereto.

Your continued cooperation in this matter is appreciated and in future communication please refer to your permit number.

Sincerely,

  
B. B. Vest  
District Manager  
Southwest District

  
cc: Central Files  
HCEPC  
Florida Public Service  
Commission

101800052004005

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

## OPERATION PERMIT

FOR Tampa Electric Company  
P. O. Box 1110  
Tampa, Florida 33601

PERMIT NO. A029-2486 DATE OF ISSUE October 14, 1976

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403, FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:  
Alex Kaiser, Director Power Plant Engineering and Environmental Planning

FOR THE OPERATION OF THE FOLLOWING:  
Gannon Station No. 5 steam generator with an electrostatic precipitator  
subject to attached conditions of approval Nos. 1, 2, 3, 4, 5, 6, 7 & 8.

LOCATED AT: Port Sutton Road, Tampa  
UTM: 17-360.0 E 3087.5 N

IN ACCORDANCE WITH THE APPLICATION DATED 7-14-76

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN. FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL 7-1-77

OR UNLESS REVOKED OR SUSPENDED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

[Signature]  
DISTRICT ENGINEER

[Signature]  
JOSEPH W. LANDERS, JR.  
SECRETARY

[Signature]  
Hillsborough County Environmental  
Protection Commission

[Signature]  
DISTRICT MANAGER

101800052004005

## BEST AVAILABLE COPY

Permit No.: A029-2486

Date: October 14, 1976

- (X) 1. Fugitive dusts, odors and other pollutants from all sources shall be effectively controlled or eliminated by suitable means. (Chapter 17-2.04 (3)(4)(5) )
- (X) 2. The pollution control equipment shall be maintained and operated in such a manner that all emissions will be in compliance with applicable rules and regulations of the DER. A log of maintenance activities shall be kept and available for DER review. (Chapter 17-2.03 (7) )
- (X) 3. Report any problems encountered in the operation of the source that may result in discharge of pollutants in amounts higher than permitted herein. Cease operation forthwith unless permission has been obtained from the regional office of the DER to operate the source for an interim period. (Chapter 17-4.13)
- (X) 4. This permit is issued on the basis of the data submitted in the application and the existing requirements of this agency as set forth in Chapter 17-2 (revised January 18, 1972) Florida Administrative Code. The owner shall obtain written permission from the DER before making changes in the operation of the source (i.e. higher production rate, different raw materials and fuels, etc.) that may increase the quantity of pollutants or change their composition. (Chapter 17-2.01)
- (X) 5. This permit is not transferable. Upon the sale or legal transfer of the source covered by this permit, the new owner must apply by letter for a transfer of this permit within thirty days. (Chapter 17-4.12)
- (X) 6. Test the emissions for the following pollutant(s) at intervals of six months from the date of this permit and submit two copies of test results to the District engineer of this agency within fifteen days of such testing. (Chapter 17-2.07 (1) )
- |                   |                     |
|-------------------|---------------------|
| (X) Particulates  | (X) Sulfur Oxides*  |
| ( ) Fluorides     | ( ) Nitrogen Oxides |
| (X) Plume Density | ( ) Hydrocarbons    |
- \*Fuel Analysis will be accepted in lieu of SO<sub>2</sub> stack sampling.
- (X) 7. Provide such sampling and testing facilities as may be necessary for the proper determination of the nature and quantity of air pollutants emitted from this source. (Chapter 17-2.07)
- (X) 8. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information:
- Annual amount of materials and/or fuel utilized.
  - Annual emissions.
  - Any changes in the information contained in the permit application.



W. C. Repton



STATE OF FLORIDA  
DEPARTMENT OF POLLUTION CONTROL

2562 EXECUTIVE CENTER CIRCLE, EAST  
MONTGOMERY BUILDING, TALLAHASSEE, FLORIDA 32301

VINCENT D. PATTON  
EXECUTIVE DIRECTOR

December 18, 1972  
Hillsborough County - AP  
Tampa Electric Company  
Gannon Station Unit #5

D. P. C. DAVID H. LEVI  
CHAIRMAN  
JAN 2 1973

WEST CENTRAL REGION

*Expired  
5-1-74*

Mr. R. D. Welch, Director  
Power Plant Engineering & Construction  
Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601

Dear Mr. Welch:

Pursuant to your recent application, please find enclosed a permit No. AC-524, dated 12/18/72 to construct an upgraded electrostatic precipitator at the above facility.

This construction permit is issued subject to the attached provisos.

Your continued cooperation will be appreciated.

Sincerely,

*Howard L. Rhodes*  
Howard L. Rhodes, P. E.  
Chief, Bureau of Permitting

*HLR/hea*

cc: *HLR* DPC, West Central Regional Office  
Board of County Commissioners - Hillsborough  
William E. Hopkins  
Hillsborough County Pollution Control

- Reg. Eng.
- Asst. Reg. Eng. *ETK*
- Ch. Chemist
- Air Engineer
- Water Eng.
- Permit Eng.
- Biologist
- Poll. Spec.
- Water Chem.
- Air Chemist
- Amb. Air
- Plant Air
- Secretaries
- FILE



**OPERATION PERMIT CONDITION  
FOR AIR POLLUTION SOURCES**

(An "X" indicates applicable conditions)

DATE: 5/25/73

TECO  
Gannon StationA029-2191  
Units 5 & 6

PERMIT NO.

- ( X ) 1. The density of visible emissions for existing sources, until July 1, 1975, shall not exceed a Ringelmann Number Two or an equivalent 40% opacity. The density of visible emissions for all sources after July 1, 1975, shall not exceed a Ringelmann Number One or an equivalent 20% opacity. If the presence of uncombined water is the only reason for failure to meet these visible emissions standards, such a failure shall not be in violation of this rule. (Chapter 17-2.04 (1) (a) (b) (d) )
- ( X ) 2. Test the emissions for the following pollutant(s) at intervals of \_\_\_\_\_ from the date of this permit and submit four copies of test results to the regional engineer of this agency within fifteen days of such testing. (Chapter 17-2.07(1) )
- |     |               |       |                 |
|-----|---------------|-------|-----------------|
| ( ) | Particulates  | ( x ) | Sulfur Oxides   |
| ( ) | Fluorides     | ( )   | Nitrogen Oxides |
| ( ) | Plume Density | ( )   | Hydrocarbons    |
- ( X ) 3. According to revised Chapter 17-2 (Revised 1-18-72), this facility must be modified, up graded, or eliminated in order to comply with applicable emission limitations. \* To insure compliance pursuant to the time limitation specified in Section 17-2.03(2), Chapter 17-2, Florida Administrative Code, the following steps toward compliance are made a condition of this permit.
- (A) Submit on or before 10/3/73 a final control plan for complying with Chapter 17-2, Florida Administrative Code. This plan is subject to approval by the regional office.
- (B) Submit on or before 4/24/74 a copy of contract(s) for modification/control equipment and/or fuels necessary to comply with Chapter 17-2.
- (C) On or before 11/18/74, construction and/or modification must be initiated. Submit 60 days prior to this date construction permit applications and necessary information.
- (D) Construction and/or modifications toward compliance must be completed by 5/4/75. Submit no later than 5/18/75 confirmation of this condition.
- (E) Submit on or before 7/1/75 proof of compliance. This must include any changes in the construction permit application as submitted, and a final engineering report and stack samples \_\_\_\_\_ to prove compliance. (test results and/or calculations)
- \* The applicable emission limitation for this facility is:  
17-2.04 Section (6) (e) 2.d Chapter 17-2,  
Florida Administrative Code.
- ( X ) 4. Submit for this facility, each calander year, on or before March 1, an emission report for the preceding calander year containing the following information.
- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions.
- (C) Any changes in the information contained in the permit application.

OPERATION PERMIT CONDITION  
FOR AIR POLLUTION SOURCES

(An "X" indicates applicable conditions)

DATE: 5/25/73

TECO  
Gannon StationAO29-2191 PERMIT NO.  
Unit 5

- (X) 1. The density of visible emissions for existing sources, until July 1, 1975, shall not exceed a Ringelmann Number Two or an equivalent 40% opacity. The density of visible emissions for all sources after July 1, 1975, shall not exceed a Ringelmann Number One or an equivalent 20% opacity. If the presence of uncombined water is the only reason for failure to meet these visible emissions standards, such a failure shall not be in violation of this rule. (Chapter 17-2.04 (1) (a) (b) (d) )
- (X) 2. Test the emissions for the following pollutant(s) at intervals of \_\_\_\_\_ from the date of this permit and submit four copies of test results to the regional engineer of this agency within fifteen days of such testing. (Chapter 17-2.07(1) )
- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Particulates<br><input type="checkbox"/> Fluorides<br><input type="checkbox"/> Plume Density | <input type="checkbox"/> Sulfur Oxides<br><input type="checkbox"/> Nitrogen Oxides<br><input type="checkbox"/> Hydrocarbons |
|--|---|
- (X) 3. According to revised Chapter 17-2 (Revised 1-18-72), this facility must be modified, up graded, or eliminated in order to comply with applicable emission limitations. \* To insure compliance pursuant to the time limitation specified in Section 17-2.03(2), Chapter 17-2, Florida Administrative Code, the following steps toward compliance are made a condition of this permit.
- (A) Submit on or before N.A. \* a final control plan for complying with Chapter 17-2, Florida Administrative Code. This plan is subject to approval by the regional office.
- (B) Submit on or before N.A. \* a copy of contract(s) for modification/control equipment and/or fuels necessary to comply with Chapter 17-2.
- (C) On or before N.A. \*, construction and/or modification must be initiated. Submit 60 days prior to this date construction permit applications and necessary information.
- (D) Construction and/or modifications toward compliance must be completed by 1/30/74. Submit no later than 2/14/74 confirmation of this condition.
- (E) Submit on or before 7/30/74 proof of compliance. This must include any changes in the construction permit application as submitted, and a final engineering report and stack samples to prove compliance. (test results and/or calculations)
- \* The applicable emission limitation for this facility is:  
17-2.04 Section (6) (e) 2.a Chapter 17-2,  
Florida Administrative Code.
- (X) 4. Submit for this facility, each calander year, on or before March 1, an emission report for the preceding calander year containing the following information.
- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions.
- (C) Any changes in the information contained in the permit application.

\*These requirements have been complied with previously

STATE OF FLORIDA  
DEPARTMENT OF AIR AND WATER  
POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Tampa Electric Company  
Gannon Station - P. O. Box 111  
Tampa, Florida 33601

PERMIT NO. AC-524

DATE December 18, 1972

PURSUANT TO THE PROVISION OF SECTION 403.061 (16) OF CHAPTER 403, FLORIDA STATUTES AND CHAPTER 17-4 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:

Mr. R. D. Welch, Director - Power Plant Engr. & Const.

FOR THE CONSTRUCTION OF THE FOLLOWING:

Upgraded Electrostatic Precipitator at Gannon Station Unit #5

LOCATED AT: Port Sutton Road, Tampa, Hillsborough County, Florida  
UTM 17-360.0 -- 3087.5

IN ACCORDANCE WITH THE APPLICATION DATED September 27, 1972  
AND IN CONFORMITY WITH THE STATEMENTS AND SUPPORTING DATA ENTERED THEREIN,  
ALL OF WHICH ARE FILED WITH THE DEPARTMENT AND ARE CONSIDERED A PART OF THIS  
PERMIT.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ITS ISSUANCE UNTIL 5/1/74  
AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REG-

ULATIONS OF THE DEPARTMENT.

*Howard L. Rhodes*

Howard L. Rhodes, Chief  
~~RAYMOND S. RYAN, CHIEF~~  
BUREAU OF PERMITTING

*Vincent D. Patton*

VINCENT D. PATTON  
EXECUTIVE DIRECTOR

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC-524

Date: 12/18/72

- [X] 1. Construction of this installation shall be completed by November 1, 1973.
- [X] 2. This construction permit expires on May 1, 1974 following an initial period of operation for appropriate testing to determine compliance with the Rules of the Florida Pollution Control Board.
- [X] 3. All applicable rules of the Department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
- [X] 4. The applicant shall continue the retention of the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A report of such inspection shall be submitted by the engineer to the Department of Pollution Control for consideration toward the issuance of an operation permit.
- [X] 5. This precipitator shall be tested for particulate matter, SOx and NOx within 30 days after it is placed in operation. These test results are required prior to our issuance of an operation permit and shall be submitted in duplicate to the DPC West Central Florida Regional Office, Post office Box 944, Winter Haven, Florida 33880.
- [X] 6. The operation of this installation shall be observed for visible emissions in accordance with Method 9 - Visible Determination of the Opacity of Emissions from Stationary Sources (Federal Register, December 23, 1971). The observation results are required prior to our issuance of an operation permit, and shall be submitted in duplicate to the DPC West Central Florida Regional Office, P. O. Box 944, Winter Haven, Florida 33880.
- [ ] 7. Stack sampling for total particulate or other contaminant emissions shall be conducted if found by the DPC West Central Florida Regional Office to be necessary as a basis for the issuance of an operation permit.
- [X] 8. Satisfactory ladders, platforms, and other safety devices shall be provided/available as well as necessary ports to facilitate the carrying out of an adequate sampling program.

(TURN OVER)

[X] 9. The following items are required prior to our issuance of an operation permit in addition to the engineer of record's report of inspection:

(a) An emission report for total particulates and sulfur oxides based upon actual operations.

(b) A tabular summary of actual records of frequencies and durations of soot blowing as well as boiler blowdown characteristics and disposal practices.

These items are required prior to our issuance of an operation permit and shall be submitted in duplicate to the DPC West Central Florida Regional Office, Post Office Box 944, Winter Haven, Florida 33880.

[X] 10. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

[X] 11. All fugitive dust generated at this site shall be adequately controlled.

[X] 12. This construction permit is subject to approval by the Board of the Florida Department of Pollution Control.

53-39

PAID  
9-29-72



TECO  
F. J. GANNON STATION  
UNIT NO. 5

D. P. C.

SEP 29 1972

State of Florida  
Department of Air and Water Pollution Control

Application For Permit to Construct Air Pollution  
Sources

WEST CENTRAL REGION

(Upgrading of Existing Particulate Removal Device)

Applicant  
(Owner or authorized agent)

R. D. Welch, Director, Power Plant Engr. & Const.  
(Name and Title)

Name of Establishment

Tampa Electric Company - F. J. Gannon Station  
(Corporation, Company, Political SD, Firm, etc.)

Mailing Address

P.O. Box 111, Tampa, Florida 33601

Location of Pollution Source

Port Sutton Road Tampa  
(Number and Street) (City)

Hillsborough  
(County)

Nature of Industrial Operation

Electric Utility - Unit No. 5

Permit Applied For:

Manager: AC-524  
Project Engineer: AC-524

William E. Hopkins  
Name

Stone & Webster Engineering Corporation  
Firm

P.O. Box 2325, Boston, Massachusetts 02107  
Mailing Address

William E. Hopkins  
Signature

5851  
Florida Registration Number

APPROVED BY  New Source  
 FLORIDA DEPARTMENT OF POLLUTION CONTROL  
 Existing Source after modification   
 V. D. PATTON, EXECUTIVE DIRECTOR  
 Upgrading of existing particulate removal device  
 Date                      Serial No.   
 Existing Source Howard L. Rhodes  
 Relocation, expansion or reconstruction   
 NOTE: This Approval is not intended to cover structural display

For Department's Use Only

Permit No.

AC 524

Date: DEC 18 1972

The undersigned owner or authorized representative\* of Tampa Electric Company is fully aware that the statements made in this form and the attached exhibits and statements constitute the application for a Construction Permit from the Florida Department of Air and Water Pollution Control and certifies that the information in this application is true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes and all the rules and regulations of the Department or revisions thereof. He also understands that the Permit is non transferable and, if granted a permit, will promptly notify the Department upon sale or legal transfer of the permitted establishment.

*R D Welch*

Signature of owner or agent.

R. D. Welch, Director, Power Plant Engr. & Const  
Name and Title

Date: 9/27/72

\*Attach letter of authorization.

---

**Estimated Schedule of  
Construction of the Project**

**Scheduled start of construction - July, 1972  
Finish - August, 1973**

**Information Regarding Pollution Sources  
and Proposed Control Facilities**

1. Estimated cost of proposed control facilities \$ 3,800,000\*
2. Prepare and attach an 8½" x 11" flow diagram, without revealing trade secrets, identifying the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit where gaseous emissions and/or airborne particulates are involved and where finished products are obtained.  
See attached Sheet 3-C1
3. Include an 8½" x 11" plot plan showing location of manufacturing processes and location of outlets for airborne emissions. Relate all flows to the flow diagram.  
See attached Sheet 3-C2
4. Submit an 8½" x 11" plot plan showing the exact location of the establishment and points of discharge in relation to the surrounding area, residences and other permanent structures and roadways.  
See attached Sheet 3-C3

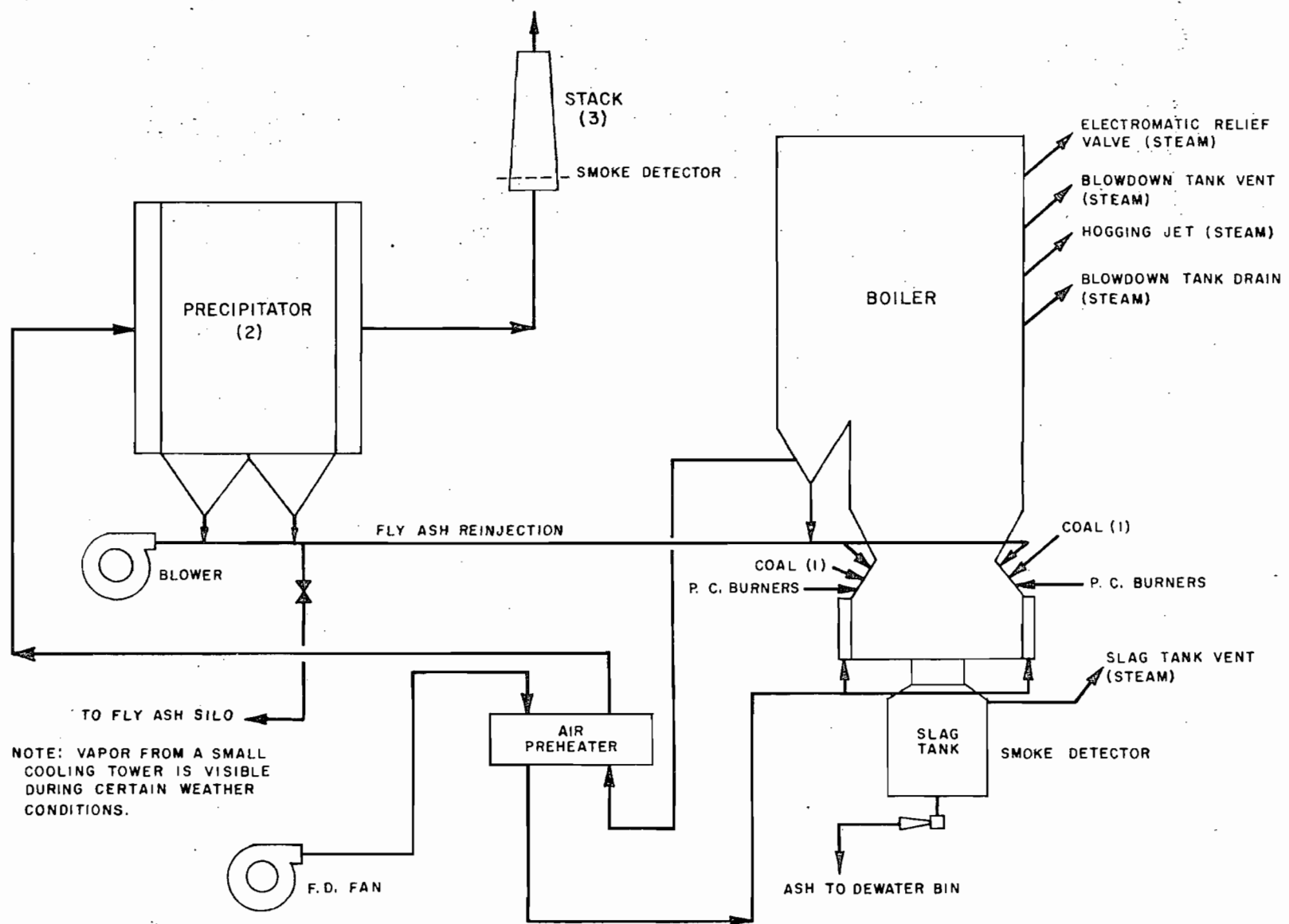
**I General**

**A. Raw Materials and Chemicals Used.**

Description	Utilization Tons/day, Lbs./day, etc.	Approximate Contaminant Content		Relate to Flow Diagram
		Type	Percent Dry Weight	

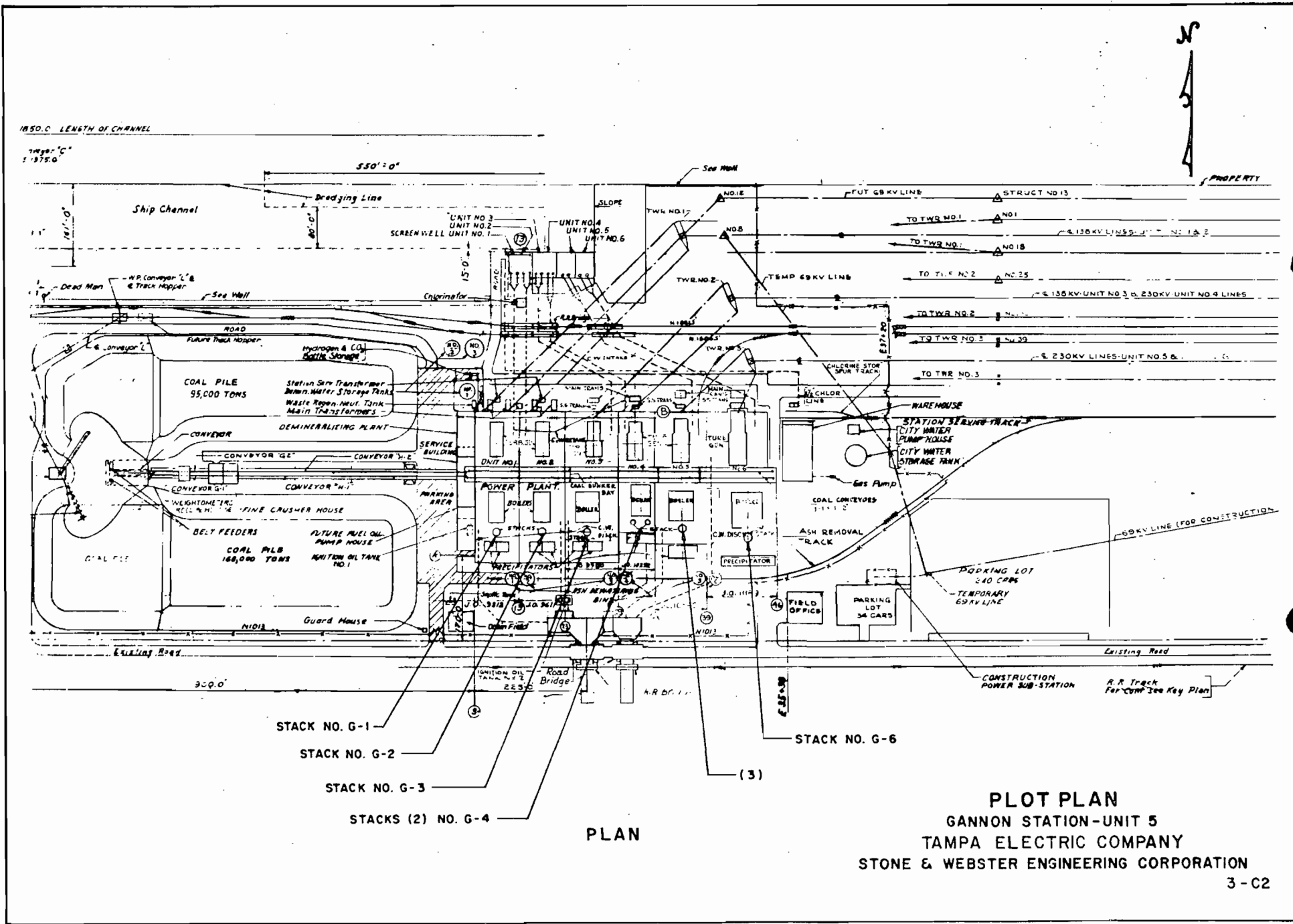
\* Includes direct and indirect costs, plus Client charges.





NOTE: VAPOR FROM A SMALL COOLING TOWER IS VISIBLE DURING CERTAIN WEATHER CONDITIONS.

**FLOW DIAGRAM**  
 GANNON STATION-UNIT 5  
 TAMPA ELECTRIC COMPANY  
 STONE & WEBSTER ENGINEERING CORPORATION  
 3-C1

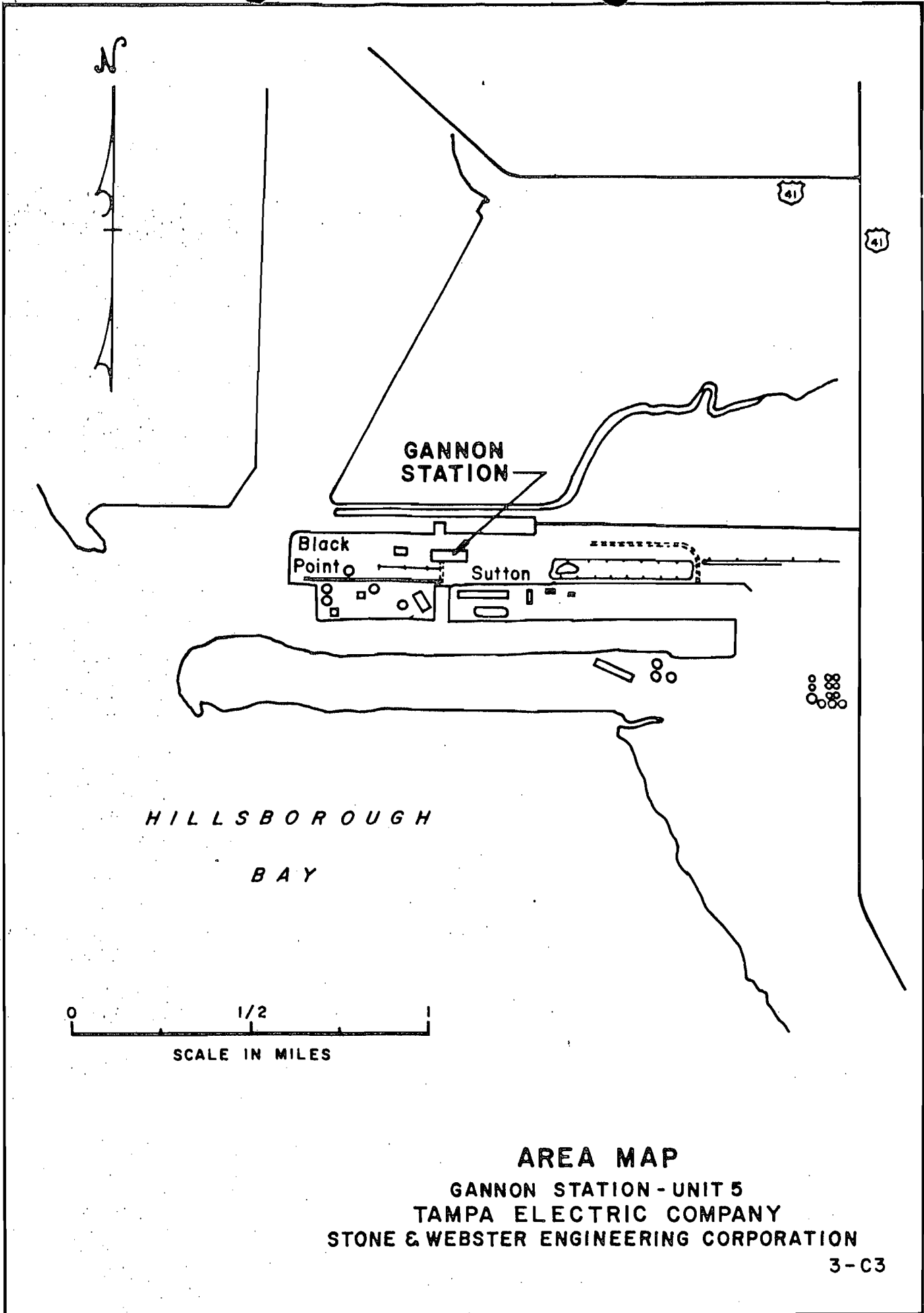


STACK NO. G-1  
STACK NO. G-2  
STACK NO. G-3  
STACKS (2) NO. G-4

STACK NO. G-6

PLAN

PLOT PLAN  
GANNON STATION-UNIT 5  
TAMPA ELECTRIC COMPANY  
STONE & WEBSTER ENGINEERING CORPORATION



**B. Fuels**

Type (Be Specific)	Daily Consumption	Gross Maximum Heat Output	Relate to Flow Diagram
Coal	2,980,000 lb/day	$3.43 \times 10^{10}$ Btu/day	(1)

**C. Products**

Description	Average Daily Production (Tons/Day, Lbs/Hr. etc.)
Electricity	3,460 MWH/day

D. Normal operation: Hours/Day 24 hr/day Day/Week 7 days/week

If operation or process is seasonal, describe: Not seasonal

*allowable part 3430.0 #/day*

**II Identification of Air Contaminants**

Compounds of:

Also -

- |          |                          |              |                                     |               |                          |
|----------|--------------------------|--------------|-------------------------------------|---------------|--------------------------|
| Chlorine | <input type="checkbox"/> | Hydrocarbons | <input type="checkbox"/>            | Acid Mists    | <input type="checkbox"/> |
| Fluorine | <input type="checkbox"/> | Smoke        | <input type="checkbox"/>            | Odors         | <input type="checkbox"/> |
| Nitrogen | <input type="checkbox"/> | Fly Ash      | <input checked="" type="checkbox"/> | Radioisotopes | <input type="checkbox"/> |
| Sulfur   | <input type="checkbox"/> | Dusts        | <input type="checkbox"/>            | Other _____   | <input type="checkbox"/> |

Specific Compounds This application is for upgrading of existing particulate removal equipment only.

### III Air Pollution Control Devices

Contaminant	Control Device	Relate to Flow Diagram	Operating Efficiency	Conditions (Particle Size Range, Temp. etc.)
Ash	<u>Electrostatic Precipitator</u>	(2)	>99%	43.5 ft/sec - 260 F (1)

Provide a brief description of the control device or treatment system. Attach separate sheets giving details regarding principle of operation, manufacturer, model, size, type and capacity of control treatment device and the basis for calculating its efficiency. Show any bypasses of the control device and specify when such bypasses are to be used and under what conditions.

The electrostatic precipitator is designed to remove solid particulate matter from the flue gases leaving the boiler. A cutaway view of a typical precipitator is shown on page 5-C1.

The operating principle and basis for calculating efficiency are shown on page 5-C2.

Major precipitator specifications are given on page 5-C3.

**NOTES**

- Exit velocity is based on average operating condition (435,000 ACFM at 260 F) and a stack diameter of 14 ft-7 in.

Exit velocity at full load is 75.3 ft/sec.

**Discharge Electrode Rappers** - choice of pneumatic or electrical in a weather enclosure; separate control system allows full flexibility of intensity and cycling.

**High voltage power supply transformer** - full range KVA, depending on size and specified efficiency of precipitator.

**Rectifier** - silicon type, oil immersed; connected by bridge circuit; full or half wave DC output.

**Collecting surface rappers** - choice of pneumatic or electrical in a weather enclosure, with flexible cycling and intensity controls.

**Insulator compartments** - house insulators and electrode rappers; fabricated of mild steel; can be equipped with heaters to minimize condensation.

**Ceiling** - column and beam construction with shell fabricated of mild steel.

**Collecting surfaces** - flat plate design with roll-formed pockets improves clean - plate sparking voltage, provides less duct turbulence for maximum efficiency, improves rappability.

**Discharge electrodes** - coppered, stainless or mild steel; carried on steel frames; supported on insulators; tensioned by cast iron weights.

**Hoppers** - pyramidal, fabricated of mild steel; baffled to prevent gas sneak-by; can be equipped with vibrators.

## ELECTROSTATIC PRECIPITATOR

GANNON STATION-UNIT 5

TAMPA ELECTRIC COMPANY

STONE & WEBSTER ENGINEERING CORPORATION

5-C1

## OPERATING PRINCIPLE OF ELECTROSTATIC PRECIPITATOR

Particles suspended in a gaseous medium enter the precipitator, passing through ionized zones around high voltage electrodes. These high voltage electrodes, through a corona effect, emit negatively charged ions into the gases surrounding the electrode.

The negatively charged gas field around each electrode ionizes passing particulates, causing the particulates to migrate to the electrode at opposite polarity.

The charged particulates gather on the grounded collector plates and lose their charge. Rappers shake loose the agglomerate, which falls into the collection hoppers for removal.

## BASIS FOR CALCULATING PRECIPITATOR EFFICIENCY

A method similar to ASME Power Test Code 27 is used to determine dust loadings. Very briefly, the method is as follows:

1. Unit is based loaded (static system).
2. Velocity profile of the inlet and outlet ducts is determined using a Pitot tube, draft gage, and thermocouple.
3. Inlet and outlet ducts are sampled simultaneously and isokinetically, using Alundum thimbles as the filtering medium.
4. Amount of dust per unit time is obtained and efficiency is arrived at by using the following formula:

$$\frac{\text{Inlet dust concentration} - \text{Outlet dust concentration}}{\text{Inlet dust concentration}} \times 100 = \text{Efficiency}$$

## MAJOR PRECIPITATOR SPECIFICATIONS

The precipitator shall be supplied by Research-Cottrell, Inc. It shall consist of two sections, installed in series with an existing precipitator and located between the air preheater and the existing precipitator.

The precipitator shall be sized and designed so that under any operating condition that reasonably can exist, and with one electrical section of the precipitator out of service across the entire width of the precipitator, the outlet dust loading will not exceed 0.02 grs/acf.

The guaranteed standard of performance will be verified by field testing in conformance with all applicable EPA standards. The first field test will be performed after the manufacturer has made all adjustments that he deems necessary for proper equipment performance after installation. If the guarantee is not met in all respects at the first test, the manufacturer shall immediately take whatever remedial steps are necessary and shall retest to demonstrate that the guarantee is met. A second field test shall be run 12 months after the first demonstration that the guarantee is met.



#### IV. Contaminant Balance

From contaminant content in raw materials, waste products, and manufactured products, summarize daily contaminant flow:

	Pounds Contaminant per Day	
	Input	Output
<b>List Raw Materials:</b>		
<b>Coal Ash</b>	358,000	
<b>List Manufactured Products:</b>		
<b>Electricity</b>	N/A	N/A
<b>List Solid Wastes:</b>		
<del>Bottom Slag</del> Ash (Bottom Slag & Flyash)		354,640
<b>List Liquid Wastes:</b>		
<b>Totals</b>	<b>358,000</b>	<b>354,640</b>
<b>Airborne Wastes (Total input minus total output)</b>		
<b>358,000 - 354,640 = 3,360 lb/day</b>		

Note: If more than one contaminant, specify each  
 Contaminants recovered in control devices should be shown as either a liquid or a solid waste.

### V. Discharged Emissions to Atmosphere

#### A. Discharge Points and Design Conditions

Discharge Point Description	Relate to Flow Diagram	Height above Ground (ft.)	Cross Sect. Area (sq. ft.)	Periods of Flow		Temp. of Discharge (°F)
				Hrs./Day	Hrs./Wk.	
Stack	(3)	230	167	24	168	260
Silo Air Vent		110	N/A	24	168	200
Steam Safety Valves		15 @ 200 3 @ 120	N/A	Emergency Only		212
Blow-off Tank Steam Vent		118	N/A	24	168	212
Cooling Tower		115	N/A	24	168	Ambient
Slag Tank Air Vent		2 @ 210	N/A	24	168	160

#### B. Tabulation of Discharged Contaminants

Discharge Point - Relate to Flow Diagram	Flow Rate at Std. Cond. (cfm)	Total Contaminants Discharged					
		Particulates		Other Contaminants (F <sup>-</sup> , SO <sub>x</sub> , NO <sub>x</sub> etc.)			
		Gr/ft3 (Std. Cond.)	lbs./Day	Gr/ft3 (Std. Cond.)	lbs./Day	Gr/ft3 (Std. Cond.)	lbs./Day
Stack (3) Avg. Oper. Cond. with reinjection	320,000	≤0.05	3,360				
Peak load with reinjection	533,000	≤0.05	-----				
Totals				As requested by Permit Division Particulates 0.098 lb/10 <sup>6</sup> Btu			
Standard conditions used		70 F and 1 atm.					

## VI. Treatment and Disposal of Liquid and Solid Waste

1. Identify the contaminants which will be discharged as liquid or solid wastes.  
Bottom Slag (Ash) & Flyash
2. Describe the treatment and disposal of liquid and solid wastes. Indicate the concentrations and volume of individual contaminants in treated wastes before disposal.

The bottom slag is tapped from the bottom of the furnace as a molten liquid. It falls into a tank of water where it rapidly cools and shatters into small pieces (approximately 1/4 in. in diameter). This water-solid mixture is pumped to a dewatering bin where the water is drained off.

The slag is then carried off by truck to a stock-piling area on the power plant site.

The solid slag is hard, glassy, insoluble in water, and chemically inert. A typical mineral analysis of slag is as follows:

SiO<sub>2</sub> - 41.06%, Fe<sub>2</sub>O<sub>3</sub> - 27.46%, Al<sub>2</sub>O<sub>3</sub> - 17%,  
CaO - 5.47%, SO<sub>3</sub> - 4.91%, K<sub>2</sub>O - 1.88%,  
TiO<sub>2</sub> - 0.83%, MgO - 0.67%, P<sub>2</sub>O<sub>5</sub> - 0.37%,  
Na<sub>2</sub>O - 0.25%, undetermined - 0.10%.

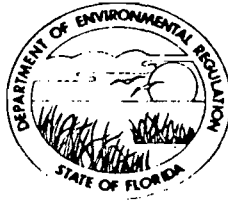
The amount of slag produced will be between 30% and 100% of the amount of ash that is present in the coal fed to the boiler.

Flyash is transferred to the storage silo whenever storage space is available. This flyash is removed and taken off site for industrial use. The amount of flyash stored and shipped from the silo will be between 70% and 0% of the ash that is present in the coal fed to the boiler, depending on the demand for flyash.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33610



BOB GRAHAM  
GOVERNOR

XXXXXXXXXX

SECRETARY

Vicki Tschinkel  
WILLIAM K. HENNESSEY  
DISTRICT MANAGER

Hillsborough County AP

Mr. Jerry L. Williams  
Manager Environmental Planning  
Tampa Electric Company  
P.O. Box 111  
Tampa, Fla. 33601

Dear Mr. Williams:

Enclosed is Permit Number AO29-47728, dated Jan. 27, 1982,  
to operate the subject air pollution source  
issued pursuant to Section 403, Florida Statutes.

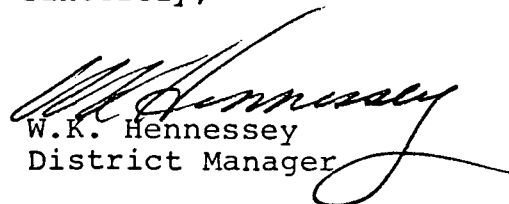
Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Section 28-5.201, Florida Administrative Code, (see reverse side of this letter). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

Acceptance of the permit constitutes notice and agreement that the Department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement action for violation of the conditions and requirements thereof.

Sincerely,

cc: HCEPC  
William N. Cantrell

  
W.K. Hennessey  
District Manager

Enclosure

RULES OF THE ADMINISTRATION COMMISSION  
MODEL RULES OF PROCEDURE  
CHAPTER 28-5  
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

PART II  
FORMAL PROCEEDINGS

28-5.201 Initiation of Formal Proceedings.

- (1) Initiation of formal proceedings shall be made by petition to the agency responsible for rendering final agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double-spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners, and an explanation of how his/her substantial interests will be affected by the agency determination;
  - (c) A statement of when and how petitioner received notice of the agency decision or intent to render a decision;
  - (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 demand for relief to which the petitioner deems himself entitled; and
  - (g) Other information which the petitioner contends is material.

\*\*\*\*\*

A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the agency determination, or if the petition is untimely. (Section 28-5.201(3)(a), FAC).

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33610



BOB GRAHAM  
GOVERNOR

~~JACOB K. HAN~~  
SECRETARY  
Vicki Tschinkel  
WILLIAM K. HENNESSEY  
DISTRICT MANAGER

APPLICANT:

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

PERMIT/CERTIFICATION  
NO. A029-47728

COUNTY: Hillsborough  
PROJECT: FFSG No. 5  
Gannon Station

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the operation of a 2284 MMBTU/hr heat input steam generator No. 5, coal fired.

Located at Port Sutton Road, Tampa, Hillsborough County.

UTM: 17-360.0E and 3087.5N

Replaces Permit: A029-7102

NEDS NO: 0040

Point ID: 05

Expires: January 25, 1987

BEST AVAILABLE COPY

PERMIT NO.: A029-47728  
APPLICANT: Tampa Electric Company

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions", and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. 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 notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact 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. 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 revocation of this permit.
4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.
7. In the case of an operation permit, 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.
8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.
13. This permit also constitutes:
  - Determination of Best Available Control Technology (BACT)
  - Determination of Prevention of Significant Deterioration (PSD)
  - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

SPECIFIC CONDITIONS

1. Test the emissions for the following pollutant(s) at intervals of 12 months from date of July 29, 1981 and submit a copy of test data to the District Engineer of this agency within fifteen days of such testing. [Chapter 17-2.700(2)], F.A.C.]

(X)Particulates	(X)Sulfur Oxides*
( )Fluorides	( )Nitrogen Oxides
(X)Plume Density	( )Hydrocarbons
	( )Total Reduced Sulfur

\*Fuel analysis is acceptable

2. Testing of emissions must be accomplished at approximately the rates as stated in the application. Failure to submit the input rates or operation at conditions which do not reflect actual operating conditions may invalidate the data [Chapter 403.161(1)(c), Florida Statutes].
3. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information as per Chapter 17-4.14, F.A.C.
- (A) Annual amount of materials and/or fuels utilized.
  - (B) Annual emissions (note calculation basis).
  - (C) Any changes in the information contained in the permit application.
4. Particulate emission limits for this unit is 0.1 lb TSP/MMBTU heat input per F.A.C. 17-2.650(2)(c)2.
5. Visible emissions are limited to a density of number 1 on the Ringelmann Chart (20 percent opacity) except that a shade as dark as No. 2 of the Ringelmann Chart (40% opacity) shall be permissible for no more than 2 minutes in any hour. [F.A.C. 17-2.600(5)(b)1].
6. Sulfur dioxide emissions are limited to 2.4 lbs. of SO<sub>2</sub> per million BTU heat input for this unit on a weekly average. A total of 10.6 tons per hour of SO<sub>2</sub> is a maximum emission from Units 1 through 6 at the Gannon Generating Station [F.A.C. 17-2.600(5)(b)3b(i)].
7. Operation and Maintenance Plan for Particulate Control F.A.C. 17-2.650
- A. Control Equipment Data (Two Electrostatic Precipitators)
    - 1. Manufacturer: Research Cottrell, Inc.
    - 2. Model Name & No.: G.O. 3129 and G.O. 2791
    - 3. Type: ESP ESP
    - 4. Design Flow: 820 KCFM 700 KCFM
    - 5. Primary Voltage: 430-480V 430-460 V
    - 6. Primary Current: 241 Amps 152 Amps
    - 7. Secondary Voltage: 53.5 KV 53.3 KV
    - 8. Secondary Current: 1.5 Amps 1.0 Amps
    - 9. Design Efficiency: 99.78% 98.5%
    - 10. Pressure Drop: 1/2" water 1/2" water
    - 11. Static Pressure: 15" water 15" water
    - 12. Rapper Duration: Impact Impact
    - 13. Rapper Frequency: 1/2 min 1/2 min
    - 14. Temperature: 293 F 289 F
    - 15. Stack Height: 306 Ft. 306 Ft.
    - 16. No. of Compartments: 32 32



B. Process Parameters

1. MMBTU Input:	2284 (239.4 MW)
2. Fuel or Fuel Mix:	Pulverized Coal
3. TPH Burned:	93.4
4. TPH Ash Produced:	8.9 Max.
5. Steam Temp:	1000 F
6. Steam Press:	2250 psi
7. Steam Flow	1660 MPPH
8. Air to Fuel Ratio:	

C. Inspection and Maintenance Schedules

1. Planned Major Outages:

Inspect exterior for loose insulation, corrosion, loose joints, and other defects.

Check for points of gas leakage (in or out).

Clean and lubricate access door hinges and test connections.

Inspect interior for items such as:

a. Check for possible leaks of oil, gas, or air at gasketed connections,

b. Check for corrosion of any component,

c. Check for broken or misaligned wires, plates, insulators, rappers, etc.,

d. Check high-voltage switch gear and interlocks.

e. Clean all insulators and check for hairline cracks or tracking,

f. Check expansion joints,

Check for signs of hopper leakage, reentrainment of particulate, and poor gas distribution.

Check for dust buildup in inlet and outlet flues.

Check for dust buildup in hoppers.

2. Weekly activities:

Inspect penthouse fans and air filters.

Observe operation of all rappers and vibrators for lift, intensity, and sequence.

Check control sets for internal dust buildup.

3. Daily activities:

Inspect system controls (voltage and amperage).

Check ash removal systems.

Log ESP parameters for each T-R set:

Primary voltage

Primary current

Secondary current

Spark rate

Continuously monitor excess air and steam flow.

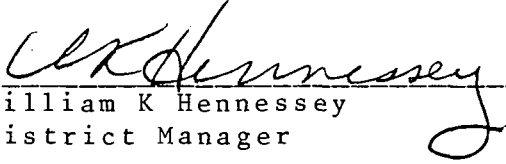
Applicant: Tampa Electric Company  
Page 5 of 5 of Permit No. A029-47728

D. Records

Records of inspection, maintenance, and performance parameter data shall be retained for a minimum of two years and shall be made available to the Department upon request. [F.A.C. 17-2.650(2)(g)5].

Revised Provisos  
Issued this 11<sup>th</sup> day of March,  
1982

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
William K Hennessey  
District Manager

EXPIRATION DATE: January 25, 1987



# Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL

Mr. Lynn F. Robinson  
Manager, Environmental Planning  
Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601-0111

DER File No.: A029-203511  
County: Hillsborough

Enclosed is Permit Number A029-203511 to operate the Gannon Station Unit No. 5 steam generator designated as Unit No. 5, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, 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 2600 Blair Stone Road, Tallahassee 32399-2400, within fourteen (14) days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends required reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

BEST AVAILABLE COPY

P 149 931 720

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

MR LYNN ROBINSON  
MGR ENV PLANNING  
TAMPA ELECTRIC CO  
PO BOX 111  
TAMPA FL 33601

PS Form 3800, June 1985

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
JAN 13 1992	

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge)      2.  Restricted Delivery (Extra charge)

3. Article Addressed to: <b>A029-203511 HK</b>	4. Article Number <b>P 149 931 720</b>
MR LYNN ROBINSON MGR ENV PLANNING TAMPA ELECTRIC CO PO BOX 111 TAMPA FL 33601	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Addressee <b>X</b>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent <b>X</b>	<b>JAN 21 1992</b>
7. Date of Delivery <b>JAN 15 1992</b>	<b>WEST DISTRICT TAMPA</b>

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

Tampa Electric Company  
Tampa, FL 33601-0111

Page Three

Executed in Tampa, Florida

Sincerely,

*J. Harry Kerns*  
J. Harry Kerns, P.E.  
District Air Engineer

JHK/CCG/bm

Attachment:

cc: Environmental Protection Commission  
of Hillsborough County

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on JAN 13 1992 to the listed persons.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

*Marilyn Quispe*  
\_\_\_\_\_  
Clerk

JAN 13 1992  
Date



# Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

**PERMITTEE:**

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

**PERMIT/CERTIFICATION**

Permit No: A029-203511  
County: Hillsborough  
Expiration Date: 01/01/97  
Project: Gannon Station Unit  
No. 5

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part of hereof and specifically described as follows:

For the operation of a 2284 MMBTU/hr. coal fired steam generator designated as Unit No. 5. This "wet" bottom boiler was manufactured by Riley Stoker Corporation and is of the opposed firing type. The generator has a nameplate capacity of 239.4 MW. Particulate emissions are controlled by two Research Cottrell, Inc. electrostatic precipitators operating in series.

Location: Port Sutton Road, Tampa

UTM: 17-360.1 E 3087.5 N NEDS NO: 0040 Point ID: 05

Replaces Permit No.: A029-125993

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Except as provided in Specific Condition No. 5, the particulate matter emission rate for this source shall not exceed 0.1 pounds per million Btu heat input, over a two hour average. [Rule 17-2.600(5)(a)2., F.A.C.]
3. Except as provided in Specific Condition No. 5, visible emissions from this source shall not exceed 20% opacity except for one two-minute period per hour during which opacity shall not exceed 40% opacity. [Rule 17-2.600(5)(a)1., F.A.C.]
4. The maximum allowable SO<sub>2</sub> emission rate from Unit No. 5 shall be 2.4 pounds of SO<sub>2</sub> per MMBTU heat input on a weekly average. In addition, Units 1 through 6 at the Gannon Station shall not emit more than a combined total of 10.6 tons of SO<sub>2</sub> per hour on a weekly average. [Rule 17-2.600(5)(a)3.b.(i), F.A.C.]
5. Excess Emissions:
  - A. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. [Rule 17-2.250(2), F.A.C.]
  - B. Excess emissions resulting from boiler cleaning (sootblowing) and load change are permitted provided that the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and providing a) best operational practices to minimize emissions are adhered to and b) the duration of the excess emissions are minimized. Visible emissions above 60% opacity are allowed for not more than 4, six-minute periods, during the 3-hour period of excess emissions allowed by part B. of this specific condition. Particulate matter emissions shall not exceed an average of 0.3 pounds per MMBtu heat input during the 3-hour period of excess emissions allowed by part B. of this specific condition. [Rule 17-2.250(3), F.A.C.]
  - C. Excess emissions resulting from malfunctions\* are permitted provided a) best operational practices to minimize emissions are adhered to and b) the duration of excess emissions are minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department of Environmental Regulation for longer duration. [Rule 17-2.250(1), F.A.C.]



PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

- D. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction is prohibited. [Rule 17-2.250(4), F.A.C.]

\* In case of excess emissions resulting from malfunctions, Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested. [Rule 17-2.250(6), F.A.C.]

6. Unit No. 5 shall be stack tested for particulate matter (under both soot blowing and non soot blowing operating conditions), sulfur dioxide and visible emissions at intervals of 12 months from the date of April 15, 1991 or within a ninety (90) day period prior to this date. All testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. (as applicable to fossil fuel steam generators under Rule 17-2.600(5)(a), F.A.C. in Table 700-1, F.A.C.). The DER Method 9 observation period shall be at least 60 minutes in duration and conducted during sootblowing conditions. In situations where DER Method No. 9 visible emissions testing is not possible during particulate matter testing, such as under overcast days, independent visible emissions testing may be performed at a later date within but not more than 5 days. Reasons for non-simultaneous testing must be provided in the test report. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing. [Rules 17-2.700(2)(a)2. and 17-2.700(2)(a)4., F.A.C.]

7. Approved compliance testing of emissions must be conducted within  $\pm 10\%$  of the maximum permitted heat input rate of 2284 MMBtu/hr., when practicable. Testing may be conducted at less than 90% of the maximum permitted heat input rate; however, if so, the maximum permitted heat input rate is automatically amended to be equal to the test heat input rate. If the maximum permitted heat input rate for this source is exceeded by more than 10%, compliance testing shall be performed within 60 days of initiation of the higher rate and the results of the tests shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County. The Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60-day time limit on a case by case basis. Acceptance of said test will automatically amend the maximum permitted heat input rate to be equal to the test heat input rate but shall not exceed 2284 MMBtu/hr. The actual heat input rate shall be specified in each test.

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

8. Compliance with the SO<sub>2</sub> emission standards set for the Gannon Station shall be achieved in part by adhering to the Francis J. Gannon Sulfur Dioxide Regulatory Compliance Plan submitted previously. A quarterly report summarizing the information necessary to determine compliance with the SO<sub>2</sub> standards for this unit and the facility shall be submitted within 45 days following a calendar quarter. The sulfur variability study will be performed on the facility during the last quarter of each year. The results shall be submitted with the quarterly report for that period. The Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation shall each receive a copy of this report. [Rule 17-2.600(5)(a)3.b.(i), F.A.C.]

9. A report shall be submitted to both the Florida Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 30 days following each calendar quarter detailing any excess opacity readings recorded by a continuous monitoring system for monitoring opacity (CEM) during the three month period. Include periods of CEM downtime, reason for downtime and action taken. For the purpose of this report, excess emissions shall be defined as all six minute average of opacity greater than 20 percent, except for two minutes up to 40 percent allowed in a 60 minute period. [Rule 17-2.710(1)(b)2. and 17-2.710(1), F.A.C.]

10. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

A copy of the report shall be submitted to the Southwest District Office of the Florida Department of Environmental Regulation and a copy to the Environmental Protection Commission of Hillsborough County.

11. Operation and Maintenance for Particulate Control: [Rule 17-2.650(2), F.A.C.]

A. Process System Performance Parameters:

- 1. Source Designators: Gannon Unit No. 5
- 2. Design Fuel Consumption Rate at Maximum Continuous Rating:  
93.4 tons coal/hour
- 3. Operating Pressure: 2,250 psi
- 4. Operating Temperature: 1000° F.
- 5. Maximum Design Steam Capacity: 1,660,000 pounds per hour

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

B. Particulate Control Equipment Data:

1. Control Equipment Designator: 2 Electrostatic Precipitators
2. Electrostatic Precipitators Manufacturer: Research Cottrell, Inc.
3. Model Numbers: G.O. 3129; G.O. 2791
4. Design Flow Rates: 820,000 ACFM; 700,000 ACFM
5. Primary Voltage: 400 volts; 400 volts
6. Primary Current: 240 amps; 195 amps
7. Secondary Voltage: 53.5 kilovolts; 64.5 kilovolts
8. Secondary Current: 1,500 milliamps; 1,000 milliamps
9. Design Efficiency: 99.78%; 98.5%
10. Pressure Drop: 0.5 in. H<sub>2</sub>O (avg); 0.5 in. H<sub>2</sub>O (avg)
11. Static Pressure: +15 in. H<sub>2</sub>O (avg); +15 in. H<sub>2</sub>O (avg)
12. Rapper Frequency: 1/2.0 min. (avg); 1/2.0 min. (avg)
13. Rapper Duration: Impact
14. Gas Temperature: 293° F. (avg); 289° F. (avg)

C. The following observations, checks and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Opacity  
Steam pressure  
Steam temperature  
Steam Flow

Daily

Fuel input  
Primary voltage  
Primary current  
Secondary current  
Inspect system controls. Make minor adjustments as needed.

Monthly

Inspect penthouse pressurizing fan filters. Replace as needed.  
Observe operation of all rapper and transformer/rectifier controls.

D. Records of inspections, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Florida Department of Environmental Regulation or the Environmental Protection Commission of Hillsborough County upon request. [Rule 17-2.650(2)(g)5., F.A.C.]

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

12. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Specifically:

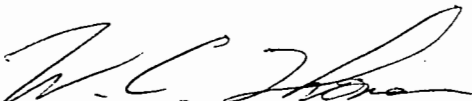
- \* Attend to accidental spills (coal and fly ash) promptly and effectively.
- \* Inspect the boiler, the electrostatic precipitators and the ductwork for gas leaks at least once a month. Note any problems and action taken.

13. A CEM to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Rule 17-2.710(1), F.A.C.

14. The Environmental Protection Commission of Hillsborough County shall be notified 15 days in advance of any compliance test to be conducted on this source. [Rules 17-2.700(2)(a)9. and 17-2.820(5), F.A.C.]

15. An original application to renew this operating permit and three (3) copies, with original seals and signatures, shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to the expiration date of this permit. [Rule 17-4.090, F.A.C.]

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

  
For Richard Garrity, Ph.D.  
Director of District Management

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any 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 of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- ( ) Compliance with New Source Performance Standards

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 for 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;
  - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the 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.



# Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL

Mr. Lynn F. Robinson  
Manager, Environmental Planning  
Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601-0111

DER File No.: A029-203511  
County: Hillsborough

Enclosed is Permit Number A029-203511 to operate the Gannon Station Unit No. 5 steam generator designated as Unit No. 5, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, 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 2600 Blair Stone Road, Tallahassee 32399-2400, within fourteen (14) days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;



(f) A statement of which rules or statutes petitioner contends required reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

P 149 931 654

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, June 1985

Sent to <i>Mr. Lynn Robinson</i>	
Street and No. <i>Mgr. Env. Planning</i>	
P.O. Box, Date and ZIP Code <i>Tampa Electric Co.</i>	
Postage <i>P.O. Box 111</i>	\$
Certified Fee <i>Tampa, FL 33601</i>	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date <b>JAN 03 1992</b>	

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge)      2.  Restricted Delivery (Extra charge)

3. Article Addressed to: *A029-203511*      **D.E.R.**

4. Article Number  
*P 149 931 654*

Type of Service:  
 Registered       Insured  
 Certified       COD  
 Express Mail       Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED

5. Signature - Addressee  
X *[Signature]*

6. Signature - Agent  
X *[Signature]*

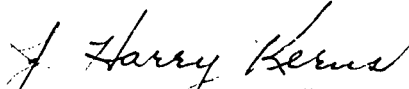
7. Date of Delivery  
**JAN 7 1992**

**TAMPA FL 33601**      **SOUTHWEST DISTRICT TAMPA**

**TAMPA FL 33601**      **JAN 03 1992**      **TAMPA FL 33601**

Executed in Tampa, Florida

Sincerely,

  
J. Harry Kerns, P.E.  
District Air Engineer

JHK/CCG/bm

Attachment:

cc: Environmental Protection Commission  
of Hillsborough County

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on JAN 03 1992 to the listed persons.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
\_\_\_\_\_  
Clerk

JAN 03 1992  
Date



# Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

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

PERMIT/CERTIFICATION  
Permit No: A029-203511  
County: Hillsborough  
Expiration Date: 01/01/97  
Project: Gannon Station Unit  
No. 5

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part of hereof and specifically described as follows:

For the operation of a 2284 MMBTU/hr. coal fired steam generator designated as Unit No. 5. This "wet" bottom boiler was manufactured by Riley Stoker Corporation and is of the opposed firing type. The generator has a nameplate capacity of 239.4 MW. Particulate emissions are controlled by two Research Cottrell, Inc. electrostatic precipitators operating in parallel.

Location: Port Sutton Road, Tampa

UTM: 17-360.1 E 3087.5 N NEDS NO: 0040 Point ID: 05

Replaces Permit No.: A029-125993

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Except as provided in Specific Condition No. 5, the particulate matter emission rate for this source shall not exceed 0.1 pounds per million Btu heat input, over a two hour average. [Rule 17-2.600(5)(a)2., F.A.C.]
3. Except as provided in Specific Condition No. 5, visible emissions from this source shall not exceed 20% opacity except for one two-minute period per hour during which opacity shall not exceed 40% opacity. [Rule 17-2.600(5)(a)1., F.A.C.]
4. The maximum allowable SO<sub>2</sub> emission rate from Unit No. 5 shall be 2.4 pounds of SO<sub>2</sub> per MMBTU heat input on a weekly average. In addition, Units 1 through 6 at the Gannon Station shall not emit more than a combined total of 10.6 tons of SO<sub>2</sub> per hour on a weekly average. [Rule 17-2.600(5)(a)3.b.(i), F.A.C.]
5. Excess Emissions:
  - A. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. [Rule 17-2.250(2), F.A.C.]
  - B. Excess emissions resulting from boiler cleaning (sootblowing) and load change are permitted provided that the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and providing: a) best operational practices to minimize emissions are adhered to and b) the duration of the excess emissions are minimized. Particulate matter emissions shall not exceed an average of 0.3 pounds per MMBtu heat input during the 3-hour period of excess emissions allowed by part B. of this specific condition. [Rule 17-2.250(3), F.A.C.]
  - C. Excess emissions resulting from malfunctions\* are permitted provided a) best operational practices to minimize emissions are adhered to and b) the duration of excess emissions are minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department of Environmental Regulation for longer duration. [Rule 17-2.250(1), F.A.C.]
  - D. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction is prohibited. [Rule 17-2.250(4), F.A.C.]

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS:

\* In case of excess emissions resulting from malfunctions, Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested. [Rule 17-2.250(6), F.A.C.]

6. Unit No. 5 shall be stack tested for particulate matter (under both soot blowing and non soot blowing operating conditions), sulfur dioxide and visible emissions at intervals of 12 months from the date of April 15, 1986 or within a ninety (90) day period prior to this date. All testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. (as applicable to fossil fuel steam generators under Rule 17-2.600(5)(a), F.A.C. in Table 700-1, F.A.C.). The DER Method 9 observation period shall be at least 60 minutes in duration and conducted during sootblowing conditions. A copy of test data shall be submitted to the Air Section of the Environmental Protection Commission of Hillsborough County and a copy to the Southwest District Office of the Florida Department of Environmental Regulation within 45 days of such testing. [Rules 17-2.700(2)(a)2. and 17-2.700(2)(a)4., F.A.C.]

7. Approved compliance testing of emissions must be conducted within  $\pm 10\%$  of the maximum permitted heat input rate of 2284 MMBtu/hr., when practicable. Testing may be conducted at less than 90% of the maximum permitted heat input rate; however, if so, the maximum permitted heat input rate is automatically amended to be equal to the test heat input rate. If the maximum permitted heat input rate for this source is exceeded by more than 10%, compliance testing shall be performed within 60 days of initiation of the higher rate and the results of the tests shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County. The Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60-day time limit on a case by case basis. Acceptance of said test will automatically amend the maximum permitted heat input rate to be equal to the test heat input rate. The actual heat input rate shall be specified in each test.

8. Compliance with the SO<sub>2</sub> emission standards set for the Gannon Station shall be achieved in part by adhering to the Francis J. Gannon Sulfur Dioxide Regulatory Compliance Plan submitted previously. A quarterly report summarizing the information necessary to determine compliance with the SO<sub>2</sub> standards for this unit and the facility shall be submitted within 45 days following a calendar quarter. The sulfur variability study will be performed on the facility during the last quarter of each year. The results shall be submitted with the quarterly report for that period. The Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation shall each receive a copy of this report. [Rule 17-2.600(5)(a)3.b.(i), F.A.C.]

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

9. A report shall be submitted to both the Florida Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 30 days following each calendar quarter detailing any excess opacity readings recorded by a continuous monitoring system for monitoring opacity (CEM) during the three month period. Include periods of CEM downtime, reason for downtime and action taken. For the purpose of this report, excess emissions shall be defined as all six minute average of opacity greater than 20 percent, except for two minutes up to 40 percent allowed in a 60 minute period. [Rule 17-2.710(1)(b)2. and 17-2.710(1), F.A.C.]

10. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

A copy of the report shall be submitted to the Southwest District Office of the Florida Department of Environmental Regulation and a copy to the Environmental Protection Commission of Hillsborough County.

11. Operation and Maintenance for Particulate Control: [Rule 17-2.650(2), F.A.C.]

A. Process System Performance Parameters:

- 1. Source Designators: Gannon Unit No. 5
- 2. Design Fuel Consumption Rate at Maximum Continuous Rating:  
93.4 tons coal/hour
- 3. Operating Pressure: 2,250 psi
- 4. Operating Temperature: 1000° F.
- 5. Maximum Design Steam Capacity: 1,660,000 pounds per hour

B. Particulate Control Equipment Data:

- 1. Control Equipment Designator: 2 Electrostatic Precipitators
- 2. Electrostatic Precipitators Manufacturer: Research Cottrell,  
Inc.
- 3. Model Numbers: G.O. 3129; G.O. 2791
- 4. Design Flow Rates: 820,000 ACFM; 700,000 ACFM
- 5. Primary Voltage: 430-480 volts; 430-460 volts
- 6. Primary Current: 241 amps; 152 amps
- 7. Secondary Voltage: 53.5 kilovolts; 53.5 kilovolts
- 8. Secondary Current: 1,500 milliamps; 1,000 milliamps
- 9. Design Efficiency: 99.78%; 98.5%

PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

10. Pressure Drop: 0.5 in. H<sub>2</sub>O (avg); 0.5 in. H<sub>2</sub>O (avg)
11. Static Pressure: +15 in. H<sub>2</sub>O (avg); +15 in. H<sub>2</sub>O (avg)
12. Rapper Frequency: 1/2.0 min. (avg); 1/2.0 min. (avg)
13. Rapper Duration: Impact
14. Gas Temperature: 293° F. (avg); 289° F. (avg)

C. The following observations, checks and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Visible emissions  
Steam pressure  
Steam temperature  
Steam Flow

Daily

Fuel input  
Primary voltage  
Primary current  
Secondary current  
Inspect system controls. Make minor adjustments as needed.

Monthly

Inspect penthouse pressurizing fan filters. Replace as needed.  
Observe operation of all rapper and transformer/rectifier controls.

D. Records of inspections, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Florida Department of Environmental Regulation or the Environmental Protection Commission of Hillsborough County upon request. [Rule 17-2.650(2)(g)5., F.A.C.]

12. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Specifically:

- \* Attend to accidental spills (coal and fly ash) promptly and effectively.
- \* Inspect the boiler, the electrostatic precipitators and the ductwork for gas leaks at least once a week. Note any problems and action taken.

13. A CEM to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Rule 17-2.710(1), F.A.C.



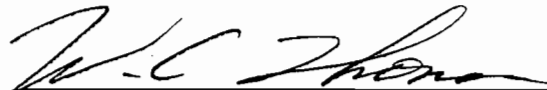
PERMITTEE:  
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-203511  
PROJECT: Gannon Station Unit No. 5

SPECIFIC CONDITIONS: (continued)

14. An original application to renew this operating permit and three (3) copies, with original seals and signatures, shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to the expiration date of this permit. [Rule 17-4.090, F.A.C.]

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION



*For* Richard Garrity, Ph.D.  
Director of District Management

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any 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 of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- ( ) Compliance with New Source Performance Standards

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 for 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;
  - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the 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.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33637-9544

813-985-7402  
SunCom - 542-8000

BOB MARTINEZ  
GOVERNOR

DALE TWACHTMANN  
SECRETARY

DR. RICHARD D. GARRITY  
DISTRICT MANAGER

March 26, 1987

NOTICE OF PERMIT

Mr. A. Spencer Autry, Manager  
Environmental Planning  
Tampa Electric Company  
Post Office Box 111  
Tampa, FL 33601-0111

Dear Mr. Autry:

Re: Hillsborough County - AP  
AO29-125993

Enclosed is Amended Permit Number AO29-125993 to operate a 2284 MMBTU/hr coal fired steam generator, designated as Gannon Station Unit No. 5, issued pursuant to Section 403.087, Florida Statutes. The permit has been amended to reflect the changes requested by Tampa Electric Company.

Persons whose substantial interests are affected by this permit have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on it. The petition must conform to the requirements of Chapters 17-103 and 28-5.201, FAC, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee Florida 32301, within fourteen (14) days of receipt of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes. This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with this paragraph or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, FAC. Upon timely filing of a petition or a request for an extension of time, this permit will not be effective until further Order of the Department.

Mr. A. Spencer Autry  
March 25, 1987

Page Two

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

Sincerely,



Tom John, P.E.  
Air Permitting Engineer

TJ/dtw

Attachment: as stated

cc: HCEPC

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 3/27/87 to the listed persons.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant  
to §120.52(10), Florida  
Statutes, with the designated  
Department Clerk, receipt of  
which is hereby acknowledged.

  
Clerk

3/27/87  
Date

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33637-9544

813-985-7402  
SunCom - 542-8000

BOB MARTINEZ  
GOVERNOR

DALE TWACHTMANN  
SECRETARY

DR. RICHARD D. GARRITY  
DISTRICT MANAGER

PERMITTEE:

Mr. A. Spencer Autry, Manager  
Environmental Planning  
Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601-0111

PERMIT/CERTIFICATION

Permit No.: AO29-125993  
County: Hillsborough  
Issuance Date: 1-6-87  
Amended Date: 3-26-87  
Expiration Date: 1-2-92  
Project: Gannon Station  
Unit No. 5.

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the operation of a 2284 MMBTU/hr coal fired steam generator designated as Unit No. 5. This "wet" bottom boiler was manufactured by Riley Stoker Corporation and is of the opposed firing type. The generator has a nameplate capacity of 239.4 MW. Particulate emissions are controlled by two Research Cottrell, Inc. Electrostatic Precipitators operating in parallel.

Location: Port Sutton Rd., Tampa

UTM: 17-360.1E 3087.5N NEDS NO: 0040 Point ID: 05

Replaces Permit No.: AO29-47728

DER Form 17-1.201(5) Page 1 of 8.

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate the enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by any order from the department.



PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purposes of;

a. Having access to and copying any records that must be kept under the conditions of the permit:

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

(a) a description of and cause of non-compliance; and

(b) the period of non-compliance, including exact 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.

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 revocation of this permit.

PERMITTEE:  
Tampa Electric Company

Permit No.: A029-125993  
Project: Gannon Station  
Unit No. 5.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Certification of Compliance with State Water Quality Standards (Section 401. PL 92-500)
- ( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

14. (con't)

b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

**SPECIFIC CONDITIONS:**

1. The maximum allowable particulate emission rate from this source shall be 0.1 pounds per MMBTU heat input over a two hour average [Section 17-2.650(2)(c)2.b.(i), F.A.C.], except for any 3 hours during a 24 hour period in which the boiler is being cleaned by soot blowing or experiencing a load change. Under these operating conditions, the maximum allowable particulate emission rate shall be 0.3 pounds per MMBTU heat input, providing best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized [Section 17-2.250(3), F.A.C.].

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

2. The maximum opacity from this source shall be 20 percent [Section 17-2.650(2)(c)2.b.(ii), F.A.C.] except for: any 2 minutes during a 60 minute period in which the opacity shall not exceed 40 percent [Section 17-2.600(5), F.A.C.]; any 3 hours during a 24 hour period of excess emissions in which the boiler is being cleaned by soot blowing or experiencing a load change the opacity shall not exceed 60%; and excess emissions otherwise allowed under Section 17-2.250(1) through (3), F.A.C.

3. The maximum allowable SO<sub>2</sub> emission rate from this unit shall be 2.4 pounds of SO<sub>2</sub> per MMBTU heat input on a weekly average. In addition, Units 1 through 6 at the Gannon Station shall not emit more than a combined total of 10.6 tons of SO<sub>2</sub> per hour on a weekly average [Section 17-2.600(5)(b)3.b.(i), F.A.C.].

4. This unit shall be stack tested for particulate matter (under both soot blowing and non soot blowing operating conditions), sulfur dioxide and visible emissions at intervals of 12 months from the date of April 15, 1986 or within a ninety (90) day period prior to this date. The method 9 test period on this source shall be sixty (60) minutes. Testing procedures shall be consistent with the requirements of Section 17-2.700, F.A.C. A copy of test data shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission and a copy to the Southwest District Office of the Department of Environmental Regulation, within 45 days of such testing.

5. Compliance with the SO<sub>2</sub> emission standards set for the Gannon Station shall be achieved in part by adhering to the Francis J. Gannon Sulfur Dioxide Regulatory Compliance Plan submitted previously. A quarterly report summarizing the information necessary to determine compliance with the SO<sub>2</sub> standards for this unit and the facility shall be submitted within 45 days following a calendar quarter. The sulfur variability study will be performed on the facility during the last quarter of each year. The results shall be submitted with the quarterly report for that period. The Hillsborough County Environmental Protection Commission and the Department of Environmental Regulation shall each receive a copy of this report.

6. A report shall be submitted to both the Florida Department of Environmental Regulation and Hillsborough County Environmental Protection Commission within 30 days following each calendar quarter detailing any excess opacity readings recorded during the three month period. For the purpose of this report, excess emissions shall be defined as all six minute averages of opacity greater than 20 percent, except as specified in Specific Condition No. 2.

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

The information supplied in this report shall be consistent with the reporting requirements of 40 CFR 51 Appendix P [Section 17-2.710(1), F.A.C.].

7. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information as per Section 17-4.14, F.A.C.

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

A copy of the report shall be submitted to the Southwest District Office of the Department of Environmental Regulation and a copy to the Hillsborough County Environmental Protection Commission.

8. Operation and Maintenance for Particulate Control [Section 17-2.650(2), F.A.C.].

A. Process System Performance Parameters:

- (1) Source Designator: Gannon Unit No. 5
- (2) Design Fuel Consumption Rate at Maximum Continuous Rating: 93.4 tons coal/hour
- (3) Operating Pressure: 2250 psi
- (4) Operating Temperature: 1000° F
- (5) Maximum Design Steam Capacity: 1,660,000 pounds per hour

B. Particulate Control Equipment Data:

- (1) Control Equipment Designator: 2 Electrostatic Precipitators
- (2) Electrostatic Precipitators Manufacturer: Research Cottrell, Inc.
- (3) Model Numbers: G.O. 3129                      G.O. 2791
- (4) Design Flow Rates: 820,000 ACFM              700,000 ACFM
- (5) Primary Voltage: 430-480 volts              430-460 volts
- (6) Primary Current: 241 amps                      152 amps
- (7) Secondary Voltage: 53.5 kilovolts              53.5 kilovolts
- (8) Secondary Current: 1500 milliamps              1000 milliamps
- (9) Design Efficiency: 99.78%                      98.5%
- (10) Pressure Drop: 0.5 in. H<sub>2</sub>O(ave)              0.5 in. H<sub>2</sub>O(ave)
- (11) Static Pressure: +15 in. H<sub>2</sub>O(ave)              +15 in. H<sub>2</sub>O(ave)
- (12) Rapper Frequency: 1/2.0 min.(ave)              1/2.0 min.(ave)
- (13) Rapper Duration: Impact                      Impact
- (14) Gas Temperature: 293° F (ave)                      289° F (ave)

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

- C. The following observations, checks and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Visible emissions  
Steam Pressure  
Steam Temperature  
Steam Flow

Daily

Fuel input  
Primary voltage  
Primary current  
Secondary current  
Inspect system controls. Make minor adjustments as needed.

Monthly

Inspect penthouse pressurizing fan filters. Replace as needed.  
Observe operation of all rapper and transformer/rectifier controls.

- D. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or Hillsborough County Environmental Protection Commission upon request [Subsection 17-2.650(2)(g)5., F.A.C.].

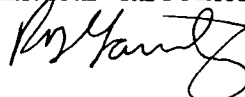
9. A continuous emission monitoring system to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Section 17-2.710(1), F.A.C.

10. An original application to renew this operating permit and three (3) copies, with original seals and signatures, shall be submitted to the Hillsborough County Environmental Protection Commission at least 60 days prior to the expiration date of this permit.

Issued: 1-6-87

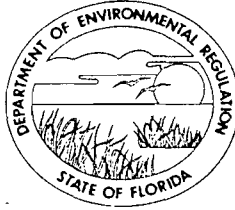
Amended this 26 day of March  
1987.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION



Richard D. Garrity, Ph.D.  
District Manager

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33610

813-985-7402  
SunCom - 570-8000

BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

DR. RICHARD D. GARRITY  
DISTRICT MANAGER

January 6, 1987

NOTICE OF PERMIT

Mr. A. Spencer Autry, Manager  
Environmental Planning  
Tampa Electric Company  
Post Office Box 111  
Tampa, FL 33601-0111

Dear Mr. Autry:

Re: Hillsborough County - AP  
AO29-125993

Enclosed is Permit Number AO29-125993 to operate a 2284  
MMBTU/hr coal fired steam generator, issued pursuant to Section  
403.087, Florida Statutes.

Persons whose substantial interests are affected by this permit  
have a right, pursuant to Section 120.57, Florida Statutes, to  
petition for an administrative determination (hearing) on it.  
The petition must conform to the requirements of Chapters  
17-103 and 28-5.201, FAC, and must be filed (received) in the  
Department's Office of General Counsel, 2600 Blair Stone Road,  
Tallahassee Florida 32301, within fourteen (14) days of receipt  
of this notice. Failure to file a petition within the fourteen  
(14) days constitutes a waiver of any right such person has to  
an administrative determination (hearing) pursuant to Section  
120.57, Florida Statutes. This permit is final and effective  
on the date filed with the Clerk of the Department unless a  
petition is filed in accordance with this paragraph or unless a  
request for extension of time in which to file a petition is  
filed within the time specified for filing a petition and  
conforms to Rule 17-103.070, FAC. Upon timely filing of a  
petition or a request for an extension of time, this permit  
will not be effective until further Order of the Department.

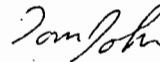
Mr. A. Spencer Autry  
January 2, 1987

Page Two

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

Sincerely,



Tom John, P.E.  
Air Permitting Engineer

TJ/dtw

Attachment: as stated

cc: HCEPC

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 1-6-87 to the listed persons.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to Section 120.52(10), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Alvin J. Wright 1-6-87  
Clerk Date



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH  
TAMPA, FLORIDA 33610

813-985-7402  
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BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

DR. RICHARD D. GARRITY  
DISTRICT MANAGER

PERMITTEE:

Mr. A. Spencer Autry, Manager  
Environmental Planning  
Tampa Electric Company  
Post Office Box 111  
Tampa, FL 33601-0111

PERMIT/CERTIFICATION

Permit No.: A029-125993  
County: Hillsborough  
Expiration Date: 1-2-92  
Project: Gannon Station  
Unit No. 5.

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the operation of a 2284 MMBTU/hr coal fired steam generator designated as Unit No. 5. This "wet" bottom boiler was manufactured by Riley Stoker Corporation and is of the opposed firing type. The generator has a nameplate capacity of 239.4 MW. Particulate emissions are controlled by two Research Cottrell, Inc. Electrostatic Precipitators operating in parallel.

Location: Port Sutton Rd., Tampa

UTM: 17-360.1E 3087.5N NEDS NO: 0040 Point ID: 05

Replaces Permit No.: A029-47728

PERMITTEE:  
Tampa Electric Company

Permit No.: A029-125993  
Project: Gannon Station  
Unit No. 5.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate the enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by any order from the department.

PERMITTEE:  
Tampa Electric Company

Permit No.: A029-125993  
Project: Gannon Station  
Unit No. 5.

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as maybe required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purposes of;

a. Having access to and copying any records that must be kept under the conditions of the permit:

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

(a) a description of and cause of non-compliance; and

(b) the period of non-compliance, including exact 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.

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 revocation of this permit.

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

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 arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
- ( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

14. (con't)

b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The maximum allowable particulate emission rate from this source shall be 0.1 pounds per MMBTU heat input over a two hour average [Section 17-2.650(2)(c)2.b.(i), F.A.C.], except for any 3 hours during a 24 hour period in which the boiler is being cleaned by soot blowing or experiencing a load change. Under these operating conditions, the maximum allowable particulate emission rate shall be 0.3 pounds per MMBTU heat input, providing best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized [Section 17-2.250(3), F.A.C.].

PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

2. The maximum opacity from this source shall be 20 percent [Section 17-2.650(2)(c)2.b.(ii), F.A.C.] except for: any 2 minutes during a 60 minute period in which the opacity shall not exceed 40 percent [Section 17-2.600(5), F.A.C.]; any 3 hours during a 24 hour period of excess emissions in which the boiler is being cleaned by soot blowing or experiencing a load change the opacity shall not exceed 60%; and excess emissions otherwise allowed under Section 17-2.250(1) through (3), F.A.C.

3. The maximum allowable SO<sub>2</sub> emission rate from this unit shall be 2.4 pounds of SO<sub>2</sub> per MMBTU heat input on a weekly average. In addition, Units 1 through 6 at the Gannon Station shall not emit more than a combined total of 10.6 tons of SO<sub>2</sub> per hour on a weekly average [Section 17-2.600(5)(b)3.b.(i), F.A.C.].

4. This unit shall be stack tested for particulate matter (under both soot blowing and non soot blowing operating conditions), sulfur dioxide and visible emissions at intervals of 12 months from the date of April 15, 1986 or within a ninety (90) day period prior to this date. The method 9 test period on this source shall be sixty (60) minutes. Testing procedures shall consistent with the requirements of Section 17-2.700, F.A.C. A copy of test data shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission and a copy to the Southwest District Office of the Department of Environmental Regulation, within 45 days of such testing.

5. Compliance with the SO<sub>2</sub> emission standards set for the Gannon Station shall be achieved in part by adhering to the Francis J. Gannon Sulfur Dioxide Regulatory Compliance Plan submitted previously. A quarterly report summarizing the information necessary to determine compliance with the SO<sub>2</sub> standards for this unit and the facility shall be submitted within 45 days following a calendar quarter. The sulfur variability study will be performed on the facility during the last quarter of each year. The results shall be submitted with the quarterly report for that period. The Hillsborough County Environmental Protection Commission and the Department of Environmental Regulation shall each receive a copy of this report.

6. A report shall be submitted to both the Florida Department of Environmental Regulation and Hillsborough County Environmental Protection Commission within 30 days following each calendar quarter detailing any excess opacity readings recorded during the three month period. For the purpose of this report, excess emissions shall be defined as all six minute averages of opacity greater than 20 percent, except as specified in Specific Condition No. 2.



PERMITTEE:  
Tampa Electric Company

Permit No.: AO29-125993  
Project: Gannon Station  
Unit No. 5.

- C. The following observations, checks and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Visible emissions  
Steam Pressure  
Steam Temperature  
Steam Flow

Daily

Fuel input  
Primary voltage  
Primary current  
Secondary current  
Inspect system controls. Make minor adjustments as needed.

Monthly

Inspect penthouse pressurizing fan filters. Replace as needed.  
Observe operation of all rappers and transformer/rectifier controls.

- D. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or Hillsborough County Environmental Protection Commission upon request [Subsection 17-2.650(2)(g)5., F.A.C.].

9. A continuous emission monitoring system to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Section 17-2.710(1), F.A.C.

10. An application to renew this operating permit shall be submitted to the Southwest District Office of the Department of Environmental Regulation, and a copy, with original seals and signatures, shall be submitted to the Hillsborough County Environmental Protection Commission at least 60 days prior to the expiration date of this permit.

Issued this 6 day of Jan  
1987.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

  
Richard D. Garrity, Ph.D.  
District Manager