

040-07

RECEIVED  
MAR 16 1989  
E.P.C. OF H.C.  
AIR PROGRAM



3/16/89

March 14, 1989

Mr. Bill Schroeder  
Environmental Protection Commission  
of Hillsborough County  
Air Pollution Control  
1410 N. 21st Street  
Tampa, FL 33605

Re: Tampa Electric Company  
F.J. Gannon Station  
Combustion Turbine  
Source Compliance Test  
Permit No. A029-85099

Dear Mr. Schroeder:

As discussed with you and Robert Stafford of my staff on March 10, 1989, this letter is written to inform you that the above referenced unit is currently on an extended outage. According to the above referenced permit, the unit must be tested for visible emissions within a 90 day window ending March 15 of each year.

In light of this unit being on an extended outage during the testing window, Tampa Electric Company will be unable to perform visible emission testing until the unit's maintenance activities are completed.

Please be informed that Tampa Electric Company will inform EPCHC as soon as possible prior to performing a visible emissions test once the unit has been returned to service. Also, we will provide EPCHC at least 15 days notification prior to testing.

Should you have any questions, please contact me.

Sincerely,

Jerry L. Williams  
Director  
Environmental

JLW/ams/NN054.DOC

COMMISSION  
PHYLLIS BUSANSKY  
RODNEY COLSON  
PAM IORIO  
RUBIN E. PADGETT  
JAN KAMINIS PLATT  
HAVEN POE  
JAMES D. SELVEY



ROGER P. STEWART  
DIRECTOR  
100 - 9th AVE  
TAMPA, FLORIDA 33605  
TELEPHONE (813) 272-5960

March 2, 1989

D. E. R.

Mr. Jerry L. Williams  
Director - Environmental  
Tampa Electric Company  
Post Office Box 111  
Tampa, FL 33601-0111

MAR - 3 1989

SOUTHWEST DISTRICT  
TAMPA

RE: A029-160269, Gannon Station Unit No. 4

Dear Mr. Williams:

The staffs of the Environmental Protection Commission of Hillsborough County and Florida Department of Environmental Regulation acknowledge receipt of your application for renewal of permit to operate the above referenced source.

Review of your application shows that it is incomplete. Pursuant to Section 17-4.07, F.A.C., we request you submit the following additional information:

1. Review of the renewal application shows it was not certified by a Florida registered professional engineer. Pursuant to Section 17-4.05(3), F.A.C., all FDER permit applications shall be certified by a Florida registered professional engineer to ensure that the health, safety, and welfare of the public is protected from the operation of the applicant's source/s. As such, we are returning the renewal application with this letter. Enclosed with the renewal form is an addendum which requires P.E. certification.

2. Pursuant to Subsection 17-2.700(2)(a)3., F.A.C., please show some documentation which shows Unit No. 4 demonstrates compliance with the PM limit of 0.3 lbs./MMBTU heat input while Unit NO. 4 is experiencing a load change. Review of our files shows that compliance with this limit has been demonstrated only during soot blowing conditions.

3. Submit proof that the record keeping requirements specified in Specific Condition 9. of the A029-80043 are being followed. We were unable to verify this during the inspection because records for parameters and other checks which needed to be recorded are located in various places, including places outside the Gannon Station.

Mr. Jerry L. Williams  
Tampa Electric Company  
Page 2

Further review of your application is temporarily held in abeyance pending receipt of your complete response. Please submit your complete response no later than April 3, 1989.

If we can be of any assistance, please call.

Sincerely,

*Victor San Agustin*

Victor San Agustin, P.E.  
Chief - Air Permitting Section

bb

cc: Bill Thomas, FDER

COMMISSION  
 PHYLLIS BUSANSKY  
 RODNEY COLSON  
 PAM IORIO  
 RUBIN E. PADGETT  
 JAN KAMINIS PLATT  
 HAVEN POE  
 JAMES D. SELVEY



ROGER P. STEWART  
 DIRECTOR

1900 - 9th AVE  
 TAMPA, FLORIDA 33605

TELEPHONE (813) 272-5960

March 2, 1989

D. E. R.

MAR - 3 1989

Mr. Jerry L. Williams  
 Director - Environmental  
 Tampa Electric Company  
 P.O. Box 111  
 Tampa, FL 33601

SOUTHWEST DISTRICT  
 TAMPA

RE: F.J. Gannon Station Permit Renewals,  
 a. Unit 4 - A029-1602~~72~~60  
 b. Units 1-4 Fly Ash Silo - A029-160259  
 c. Units 5 and 6 Fly Ash Silo - A029-160260 57  
 d. Combustion Turbine - A029-160260  
 12

Dear Mr. Williams:

The staffs of the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation acknowledge the receipt of your renewal applications to operate the F.J. Gannon Station Unit 4 Economizer Ash Silo, Units 1-4 Fly Ash Silo, Units 5 and 6 Fly Ash Silo, and the Combustion Turbine.

Review of the renewal applications shows each was not certified by a Florida registered professional engineer. Pursuant to Section 17-4.05(3), F.A.C., all FDER permit applications shall be certified by a Florida registered professional engineer to ensure the health, safety, and welfare of the public is protected from the operation of the applicant's source/s. As such, we are returning the renewal application with this letter. Enclosed with the renewal form is an addendum which requires P.E. certification.

Pursuant to Subsection 17-2.700(2)(a)3., F.A.C., a mass emissions test is required on a source that is subject to any emission limiting standard to demonstrate compliance prior to obtaining a renewed operating permit. The fly ash silo baghouses need not demonstrate compliance with their PM limits pursuant to Subsection 17-2.700(1)(d)6., F.A.C., since the silos are material handling sources. The combustion turbine however, is not a material handling source so a test that demonstrates compliance with the 0.03 gr./dscf standard must be conducted prior to obtaining a renewed operating permit. Please submit information which demonstrates the above rule has been followed.

Best Available Copy

Mr. Jerry L. Williams  
Tampa Electric Company  
Page 2

During the inspection conducted on February 23, 1989, the pressure drop of the East baghouse located atop the #1 - #4 Fly Ash Silo had a reading of 5.5 inches of water. An investigation of the manometers after bag pulsing shows the pressure drop reading still stayed at 5.5 inches of water. Furthermore, review of the files at your plant showed other days where readings were in excess of 5 inches of water from this source. Review of the Operation and Maintenance Plan submitted with the application shows a pressure drop reading of 5 inches of water indicates dirty bags. We have reason to believe the upper pressure drop limit of 5 inches is either incorrect, or the manometers have malfunctioned and should be repaired because the manometers should show a pressure drop decrease after pulsing dirty bags. Please correct this discrepancy and advise us whether or not we should change the pressure drop's upper limits in fly ash silos permit renewals.

Pursuant to Subsection 17-2.210(2), F.A.C., your permit for the #4 Economizer Ash Silo can be renewed for only a period not to exceed five years from the date of shutdown provided you demonstrate that the source would need to be reactivated and used. Please submit information which demonstrates that this source will be used in the next five years as well as the date of shutdown.

During the facility inspection, it was noted that a truck operator was sweeping the roof of his overloaded tanker during a fly ash loading operation causing excess visible emissions. Furthermore, an inspection of the grounds adjacent to the loadout area shows that reasonable precautions need to be undertaken by your company to minimize the occurrence of fugitive emissions. Pursuant to Subsection 17-2.610(3), F.A.C., specify the precautionary measures you intend to take to prevent such emissions as stated above.

Please be advised that pursuant to Section 17-4.07, F.A.C., the operating permits will not be issued until the requested information above is received. For now, your applications are deemed incomplete. We request your immediate attention to this matter. Please submit the required information no later than April 3, 1989.

If I can be of any further assistance, please call me at 272-5530.

Sincerely

*Victor San Agustin Sr*  
Arthur J. Wells  
Air Permit Engineer

bb

cc: J. Harry Kerns/George Richardson, FDER



CERTIFIED MAIL #P-601 896 795  
RETURN RECEIPT REQUESTED

February 1, 1989

Roger P. Stewart  
Environmental Protection Commission  
of Hillsborough County  
1900 - 9th Avenue  
Tampa, FL 33605

Richard D. Garrity, Ph.D.  
Florida Department of  
Environmental Regulation  
Southwest District  
4520 Oak Fair Boulevard  
Tampa, FL 33610-7347

Re: Tampa Electric Company  
Air Operations Permit  
Renewal Application  
Gannon Station Combustion Turbine

Gentlemen:

Enclosed please find an original and three (3) copies of an Application for Renewal of Permit to Operate an Air Pollution Source, including an operation and maintenance plan for the unit and an authorization letter for the applicant.

The application package, together with a check for \$355.00 to the Hillsborough County Board of County Commissioners and a check for \$750.00 to the Florida Department of Environmental Regulation, are included with Mr. Stewart's copy.

If you should have any questions, please feel free to call.

Sincerely,

A handwritten signature in cursive script that reads 'Jerry L. Williams'.

Jerry L. Williams  
Director  
Environmental

JLW/ams/LL031.DOC

Enclosures



FEB 02 1989

SOUTH WEST DISTRICT  
TAMPA

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

4520 OAK FAIR BLVD.  
TAMPA, FLORIDA 33610-7347

813-623-5561  
Suncom—552-7612



BOB MARTINEZ  
GOVERNOR  
DALE TWACHTMANN  
SECRETARY  
DR. RICHARD D. GARRITY  
DISTRICT MANAGER

August 20, 1987

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

Dear Mr. Autry:

The Department is in receipt of your request to amend DER permit no. AO29-85099. The following changes are hereby made in the permit:

Specific Condition No. 1 -

FROM: Test the emissions for the following pollutant(s) at intervals of 12 months from the date March 15, 1984, or within a ninety (90) day period prior to this date, and submit 2 copies of test data to the Air Section of the Hillsborough County Environmental Protection Commission Office within forty-five days of such testing [Section 17-2.700(2), Florida Administrative Code (F.A.C.)].

(X) Opacity

\*Fuel analysis may be submitted for required sulfur dioxide emission test.

TO: Test the emissions for the following pollutant(s) at intervals of 12 months from the date March 15, 1984, or within a ninety (90) day period prior to this date, and submit a copy of test data to both the Environmental Protection Commission of Hillsborough County and Florida Department of Environmental Regulation within forty five days of such testing. Testing procedures shall be consistent with the requirements of Section 17-2.700, F.A.C.

(X) Opacity

Specific Condition No. 5 -

FROM: 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 fuel utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

TO: Submit for this facility, each calendar year, on or before March 1, an emissions 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 fuel utilized.
- (B) Annual emission (note calculation basis).
- (C) Any changes in the information contained in the permit application.

An emissions report shall be submitted to both the Environmental Protection Commission of Hillsborough County and Florida Department of Environmental Regulation.

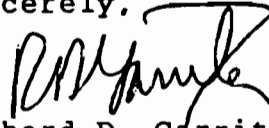
Persons whose substantial interests are affected by this permit amendment have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on it. The petition must conform to the requirements of Chapters 17-103 and 28-5.201, FAC, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee Florida 32399, 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.



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; 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.

This letter must be attached to your permit and becomes a part of that permit. If you have any questions, please call Tom John of my staff at (813) 623-5561.

Sincerely,



Richard D. Garrity, Ph.D.  
District Manager  
Southwest District

cc: EPCHC

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT AMENDMENT and all copies were mailed before the close of business on 8-21-87 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.

Jean Schesta  
Clerk

8-21-87  
Date



June 2, 1986

Mr. Bill Thomas  
Florida Department of  
Environmental Regulation  
District Office  
7601 Highway 301 North  
Tampa, Florida 33610-9544

Re: Tampa Electric Company  
Administrative Changes to  
Air Permits

Dear Mr. Thomas:

During a recent review of Tampa Electric Company's air permits, administrative inconsistencies were identified that have lead to hardships on us that we feel are not intended by the Department. As shown on the attachment, the inconsistencies involve stack test scheduling, notifications and reporting requirements contained in older air permits. The requested modifications reflect recent changes in Department regulations which depart from previous Department rules or policies.

In order to communicate our concerns and get feedback from the Department, members of my staff met with Mr. Jim Estler of your staff and Mr. Jerry Campbell of the Hillsborough County Environmental Protection Commission on May 29, 1986. Based on this meeting, it is our understanding that neither Mr. Estler nor Mr. Campbell are opposed to modifying the applicable air permits to provide consistency as outlined to them.

Tampa Electric Company respectfully requests that the air permits listed on the attachment be modified to reflect consistent administrative conditions as stated. The requested modification will not change our environmental limits, they only clarify the conditions and time frames for compliance related reports.

We would greatly appreciate an expeditious review of our request for permit modifications, especially as they relate to Units 4, 5 and 6 at Gannon Station which will required compliance testing or excess opacity report submittal in the near future.

D. E. R.

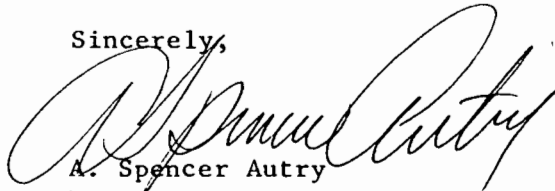
JUN 04 1986

SOUTH WEST DISTRICT  
TAMPA

Mr. Bill Thomas  
June 2, 1986  
Page 2

Thank you for your cooperation, and, please call me if you have any questions.

Sincerely,



A. Spencer Autry  
Manager  
Environmental Planning

ASA/jst/004/EE1

Attachment

cc: Jim Estler, FDER  
Jerry Campbell, HCEPC

INCONSISTENCIES IN ADMINISTRATIVE PROCEDURES

DER AIR PERMITS  
TAMPA ELECTRIC COMPANY (TEC)

The following modifications will provide consistent reporting and administrative requirements for the two major reports required in TEC's air permits:

1. Specify that all annual compliance testing should be done within a 90 day period prior to the specified annual test date. (The regulations require annual test during Fiscal year - October 1 to September 30.)

The permits below either do not address the 90 day test window, or are more stringent than 90 days:

<u>Source</u>	<u>Permit Number</u>	<u>Specific Condition</u>
<u>Hookers Point</u>		
Unit 1	A029-47726	1
Unit 2	A029-47725	1
Unit 3	A029-47724	1
Unit 4	A029-47723	1
Unit 5	A029-47722	1
Unit 6	A029-47721	1
 <u>F.J. Gannon</u>		
Unit 4	A029-80043	4
Unit 5	A029-47728	1
Unit 6	A029-47727	1
Combustion Turbine 1	A029-85099	1
Fly Ash Silo 1	A029-80048	1
Fly Ash Silo 2	A029-80046	1
Economiser Silo	A029-87409	1
 <u>Big Bend</u>		
Unit 1	A029-63296	1
Combustion Turbine 1	A029-85100	1

2. Specify that all compliance test notifications be non-written notifications pursuant to 17-2.700(2)(a)5:

The permits below contain a written notification requirement:

<u>Source</u>	<u>Permit Number</u>	<u>Specific Condition</u>
<u>F.J. Gannon</u>		
Combustion Turbine 1	A029-85099	4
Fly Ash Silo 1	A029-80048	5
Fly Ash Silo 2	A029-80046	3
Economiser Ash Silo	A029-87409	3

Big Bend

Combustion Turbine 1	A029-85100	5
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3. Specify that all compliance test submittals shall be within 45 days as required in 17-2.700(7).

The permits below contain a test submittal date more stringent than 45 days.

<u>Source</u>	<u>Permit Number</u>	<u>Specific Condition</u>
<u>Hookers Point</u>		
Unit 1	A029-47726	1
Unit 2	A029-47725	1
Unit 3	A029-47724	1
Unit 4	A029-47723	1
Unit 5	A029-47722	1
Unit 6	A029-47721	1

F.J. Gannon

Unit 5	A029-47728	1
Unit 6	A029-47727	1

4. Specify that excess emissions refer to 6-minute average opacity.

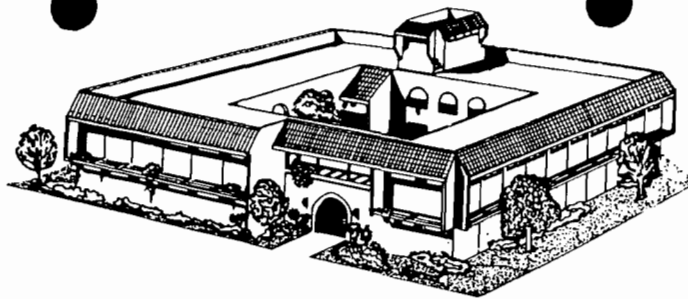
The permits below either do not address the averaging time or specify a 1-minute average:

<u>Source</u>	<u>Permit Number</u>	<u>Specific Condition</u>
<u>F.J. Gannon</u>		
Unit 4	A029-80043	7
<u>Big Bend</u>		
Unit 1	A029-63296	6

HILLSBOROUGH COUNTY  
ENVIRONMENTAL PROTECTION

COMMISSION

RODNEY COLSON  
RON GLICKMAN  
PAM IORIO  
RUBIN E. PADGETT  
JAN KAMINIS PLATT  
JAMES D. SELVEY  
PICKENS C. TALLEY II



ROGER P. STEWART  
DIRECTOR

1900 - 9th AVE  
TAMPA, FLORIDA 33605

TELEPHONE (813) 272-5980

MEMORANDUM

D. E. R.

Date June 12, 1986

To Jim Estler

From Jerry Campbell *Jc*

Subject: TECO Permit Amendments

*[Signature]*  
JUN 16 1986

SOUTH WEST DISTRICT  
TAMPA

Having reviewed TECO's requests in Spencer Autry's letter of June 2, 1986 to Bill Thomas, I recommend approval of the following amendments:

Gannon Unit 4 (A029-80043)

Change Specific condition #4 to read:

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 May 30, 1984 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.

Change specific condition #7 to read:

7. A report shall be submitted to both the Department of Environmental Regulation and the 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 emission shall be defined as all six minute averages of opacity greater than 20 percent, except as specified in Specific Condition No. 2. 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.]. This report shall be submitted in duplicate to the Hillsborough County Environmental Protection Commission.

Gannon Unit 5 (A029-47728)

Change specific condition #1 to read:

1. 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 July 29, 1981 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing.

Gannon Unit #6 (A029-47727)

Change Specific condition #1 to read:

1. 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 July 29, 1981 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing.

Hookers Point Unit #1 (A029-47726)

Change specific condition #1 to read:

1. 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 January 27, 1982 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing. A fuel analysis may be submitted in lieu of stack testing for sulfur dioxide.

Hookers Point Unit #2 (A029-47725)

Change specific condition #1 to read:

1. 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 January 27, 1982 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing. A fuel analysis may be submitted in lieu of stack testing for sulfur dioxide.

Hookers Point Unit #3 (A029-47724)

Change specific condition #1 to read:

1. 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 January 27, 1982 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing. A fuel analysis may be submitted in lieu of stack testing for sulfur dioxide.

Hookers Point Unit #4 (A029-47723)

Change specific condition #1 to read:

1. 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 January 27, 1982 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing. A fuel analysis may be submitted in lieu of stack testing for sulfur dioxide.

Hookers Point Unit #5 (A029-47722)

Change specific condition #1 to read:

1. 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 January 27, 1982 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing. A fuel analysis may be submitted in lieu of stack testing for sulfur dioxide.

Hookers Point Unit #6 (A029-47721)

Change specific condition #1 to read:

1. 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 January 27, 1982 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. Two copies of the test report shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing. A fuel analysis may be submitted in lieu of stack testing for sulfur dioxide.

Gannon Combustion Turbine #1 (A029-85099)

Change specific condition #1 to read:

1. Test the emissions for the following pollutant(s) at intervals of 12 months from the date March 15, 1984, or within a ninety (90) day period prior to this date, and submit 2 copies of test data to the Air Section of the Hillsborough County Environmental Protection Commission office within forty five days of such testing [Section 17-2.700 (2), Florida Administrative Code, (F.A.C.)].

- |     |              |     |                      |
|-----|--------------|-----|----------------------|
| ( ) | Particulates | ( ) | Sulfur Oxides        |
| ( ) | Fluorides    | ( ) | Nitrogen Oxides      |
| (X) | Opacity      | ( ) | Hydrocarbons         |
|     |              | ( ) | Total Reduced Sulfur |

\*Fuel analysis may be submitted for required sulfur dioxide emission test.



Page 4

Change specific condition #4 to read:

4. The Hillsborough County Environmental Protection Commission shall be notified 15 days prior to compliance testing.

Gannon Fly Ash Silo #1 - 4 (A029-80048)

Change specific condition #1 to read:

1. Compliance with the opacity standard set forth below shall be demonstrated by conducting 30 minute visible emission tests as units #3, #2 & #1 are converted to coal and begin utilizing this silo. By November 15, 1984, 60 days prior to the expiration of construction permit #AC29-41941, a visible emission test shall be submitted while loading the silo from Units #3 & #4. By January 15, 1986, 60 days prior to the expiration of construction permit A029-41942, a visible emission test shall be submitted while loading the silo from Units #2, #3 & #4. By January 15, 1987, 60 days prior to the expiration of construction permit AC29-41943, a visible emission test shall be submitted while loading the silo from Unit #1 and two of the remaining 3 units. Thereafter, visible emissions tests shall be conducted while loading the silo from 3 of the 4 units at 12 month intervals. Tests can be conducted within a ninety (90) day period prior to the dates specified above.

Change specific condition #5 to read:

5. The Hillsborough County Environmental Protection Commission shall be notified 15 days prior to compliance testing.

Gannon Fly Ash Silo #5-6 (A029-80046)

Change specific condition #1 to read:

1. Test the baghouse for visible emissions at intervals of twelve months from the date of November 15, 1983 or within a ninety (90) day period prior to this date. The compliance test shall be conducted using EPA Method #9 (opacity). The Method #9 test interval on this source shall be thirty (30) minutes. Two copies of the test data shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing.

Change specific condition #3 to read:

3. The Hillsborough County Environmental Protection Commission shall be notified 15 days prior to compliance testing.

Gannon Economiser Silo (A029-87409)

Change specific condition #1 to read:

1. Test the baghouse for visible emissions at intervals of twelve months from the date of December 4, 1983 or within a ninety (90) day period prior to this date. The compliance test shall be conducted using EPA Method #9 (opacity). The Method #9 test interval on this source shall be thirty (30) minutes. Two copies of the test data shall be submitted to the Air Section of the Hillsborough County Environmental Protection Commission within 45 days of testing.

Page 6

Change specific condition #2 to read:

2. The Hillsborough County Environmental Protection Commission shall be notified 15 days prior to compliance testing.

If you have any questions concerning the contents of this memorandum, please contact me.

JC/ch

CH2/16

TO: File *DM*  
THROUGH: Bill Thomas *WJ*  
FROM: Jim Estler *awc 8-7-84*  
DATE: July 25, 1984  
SUBJECT: Hillsobrough County - AP  
Tampa Electric Company  
A029-85099 and 85100

Attached are two permits for the renewal of the operating permits on the trubine generating units at Big Bend and Gannon Stations. These sources are in compliance with Chapter 17-2, F.A.C.

HCEPC comments were received on June 13, 1984 and incorporated into the permits.

Recommend these permits be issued as conditioned.

/rb

985-1106

Pr

# COUNTY

# OF HILLSBOROUGH



D. E. R.

JUN 13 1984

MEMORANDUM

SOUTH WEST DISTRICT

Date June 11, 1984

To TAMPA  
Jim Estler, D.E.R. through Bill Thomas, D.E.R. and Jerry Campbell, E.P.C.

From Victor San Agustin, E.P.C.

Subject: Renewal Of A029-19056 and 19057, Two Of TECO'S Gas Turbines

I recommend approval to issue renewals with the following specific conditions:

A029-19056, BIG BEND UNIT (Source is exempt from RACT requirements as indicated by Mr. Rogers' memo to Bill Thomas, and by Bill Thomas' memo to Larry George.)

1. Visible emissions shall not exceed 20% in opacity. [Chap. 1-3.03, I.B. of the H. C.E.P.C. Rules]
2. The compliance test, due annually on March 19 of each year of this permit, shall be an E.P.A. Method 9, Determination of Opacity of Emissions, with a minimum test duration of 60 minutes.
3. The amount of fuel shall be included in the test results.
4. The E.P.C. shall be given 15 days prior notice on any compliance testing conducted on this source.
5. Two copies of the Annual Operating Report shall be submitted to the E.P.C. on or before March 1 of each year of this permit.
6. Only distillate fuel oils shall be used.
7. Compliance testing shall be conducted within 10% of 14 MW.

A029-19057, GANNON UNIT

1. Maximum opacity shall not exceed 5%. [17.2.650(2)(c)12.]
2. The compliance test, due annually on March 15 of each year of this permit, shall be an E.P.A. Method 9, Determination of Opacity of Emissions, with a minimum test duration of 60 min. [To show my justification for not requiring annual particulate stack testing, please refer to the calculations below:

Page two

June 11, 1984

Renewal of A029-19056 and 19057, Two of TECO'S Gas Turbines

From AP-42, TSP emission factor =  $5 \text{ lb}/10^3 \text{ gal}$  of distillate oil burned.  
(Confidence Level = B)

$$\text{Hourly TSP emission rate} = \frac{5.3 \text{ lb}}{10^3 \text{ gal}} \times 1.885 \frac{10^3 \text{ gal}}{\text{hr}} = 9.4 \frac{\text{lb}}{\text{hr}}$$

$$1983 \text{ TSP emissions} = 9.4 \frac{\text{lb}}{\text{hr}} \times \frac{61 \text{ hrs}}{\text{yr}} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = 0.3 \text{ TPY}$$

$$\text{Allowable TSP emission rate} = 0.03 \frac{\text{gr}}{\text{dscf}} \times 475,000 \frac{\text{dscf}}{\text{min}} \times \frac{60}{7000} = 122.14 \frac{\text{lb}}{\text{hr}}$$

Comparing the actual and the allowable rates, I can safely say, the mass emission standard cannot be exceeded.

3. Compliance testing shall be conducted within 10% of 14MW.
4. The amount of fuel used shall be included in the test results.
5. Only distillate fuels shall be used.
6. The E.P.C. shall be given 15 days prior notice on any compliance testing conducted on this source.
7. Two copies of the Annual Operating Report shall be submitted to the .E.P.C. on or before March 1 of each year of this permit.
8. Operation and Maintenance Plain.
9. Appropriate Parameters:
  - a. Fuel - Distillate fuel oil #2
  - b. Average consumption rate - 1070 gal/hr.
  - c. Maximum consumption rate - 1885 gal/hr
  - d. Power Output - 14 MW.

RECEIVED

JUN 5 1984

H.C.E.P.C.

May 25, 1984

Mr. Victor San Agustin  
Environmental Engineer  
Hillsborough County Environmental  
Protection Commission  
1900 - 9th Avenue  
Tampa, FL 33605

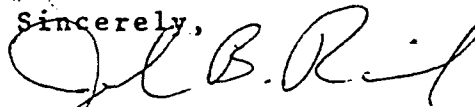
Dear Mr. San Agustin:

In reference to your letter dated April 26, 1984 below are the responses to your questions.

1. No, neither of the two gas turbines are regenerative.
2. Stack dimensions - elevation . . . . . 35'  
cross section . . . . . 10' 5" x 8' 4"
3. The Gannon Station combustion turbine operated 61 hours during 1983. The Big Bend Station combustion turbine #1 operated 91 hours during 1983.
4. The power output of the Gannon combustion turbine during the compliance test dated March 15, 1984 averaged 12 MW.
5. See Attached

I hope that these responses satisfy your informational needs so that these permits may be issued promptly. If you have any further questions, please feel free to contact Mr. Hugh Smith (228-4844) of my staff.

Sincerely,



John B. Ramil, P.E.  
Manager  
Environmental Planning

JBR/tb

cc: Jim Estler

GANNON STATION COMBUSTION TURBINE  
OPERATION AND MAINTENANCE PLAN

The combustion turbine uses number 2 fuel oil and is typically used only in emergency situations. The unit may be started at the plant or remotely from the generation control center.

The combustion turbine is very important to the overall reliability of the electrical system. Because of its importance, a thorough preventive maintenance plan is followed to assure service when needed from the combustion turbine. The preventive maintenance plan requires that a mechanic each month check:

- condition of inlet air filters
- tightness of louvre arm
- oil and fuel leaks
- belts for condition and tension
- air compressor fan condition
- the CO<sub>2</sub> fire protection system
- to insure that the batteries are properly charged
- lube oil flow and level
- cooling water level
- radiator fins for damage or blockage
- motors and brushes
- oil and fuel pumps
- lube oil filter pressure differential
- compartment heaters

If any problems are detected in the above equipment, the problem is either fixed immediately or a job request form is filled out to have the repair scheduled for a later time.

The maintenance plan also requires that mechanics monthly:

- lubricate fan bearings
- clean water pump strainer

The preventive maintenance plan requires a mechanic to semi-annually.

- change oil in gear reducer and in diesel engine crankcase
- lubricate pump seal with grease
- remove and clean fuel oil line strainers
- change oil, fuel, and air filters
- clean or replace water filter
- clean crankcase breather
- check water level alarm

Each time the combustion turbine is started, an operator inspects the unit for oil and fuel leaks, and checks the cooling water level. The operator also checks the exhaust stack for excess emissions. The combustion turbine has alarms on all of the critical operating components to alert plant operators of any major problems during operation.

Fuel flow is measured by a flow integrater and reported in the yearly emissions inventory.



HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION COMMISSION

INSPECTION REPORT EXECUTIVE SUMMARY

PLANT NAME TECO GAUNTON NEDS 0040 DATE/TIME 4/24/84 3:00

PLANT LOCATION Port Sutton Rd. # OF NEDS POINTS 1

PROCESS DESCRIPTION Gas Turbine fired with #2 fuel oil.

COMPLIANCE VERIFICATION ENFORCEMENT

{ }

PERMIT REVIEW OTHER

{✓}

PERSONS CONTACTED-TITLE Hugh Smith, Chemist in Environmental Planning. Dave Gellerson.

NEDS POINTS CHECKED

1

NEDS POINTS IN COMPLIANCE

NEDS POINTS IN VIOLATION

SUMMARY OF FINDINGS Similar situation to the Big Bend plant. Inoperative turbine. No knowledge of location of flowmeter. Environmental controller has already departed the office. Requested that I be notified during start-up.

INSPECTION COMMENTS FOR APIS (LIMIT 50 SPACES) EMERGENCY UNIT. INOPERATIVE DURING VISIT.

INSPECTOR'S SIGNATURE

Antonio In Agente

HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION COMMISSION

INSPECTION REPORT EXECUTIVE SUMMARY

PLANT NAME TELO BIG BEND NEDS 0039 DATE/TIME 4/24/84 4:00

PLANT LOCATION RUSKIN # OF NEDS POINTS 1

PROCESS DESCRIPTION Gas turbine fired with #2 fuel oil.

COMPLIANCE VERIFICATION ENFORCEMENT  PERMIT REVIEW  OTHER

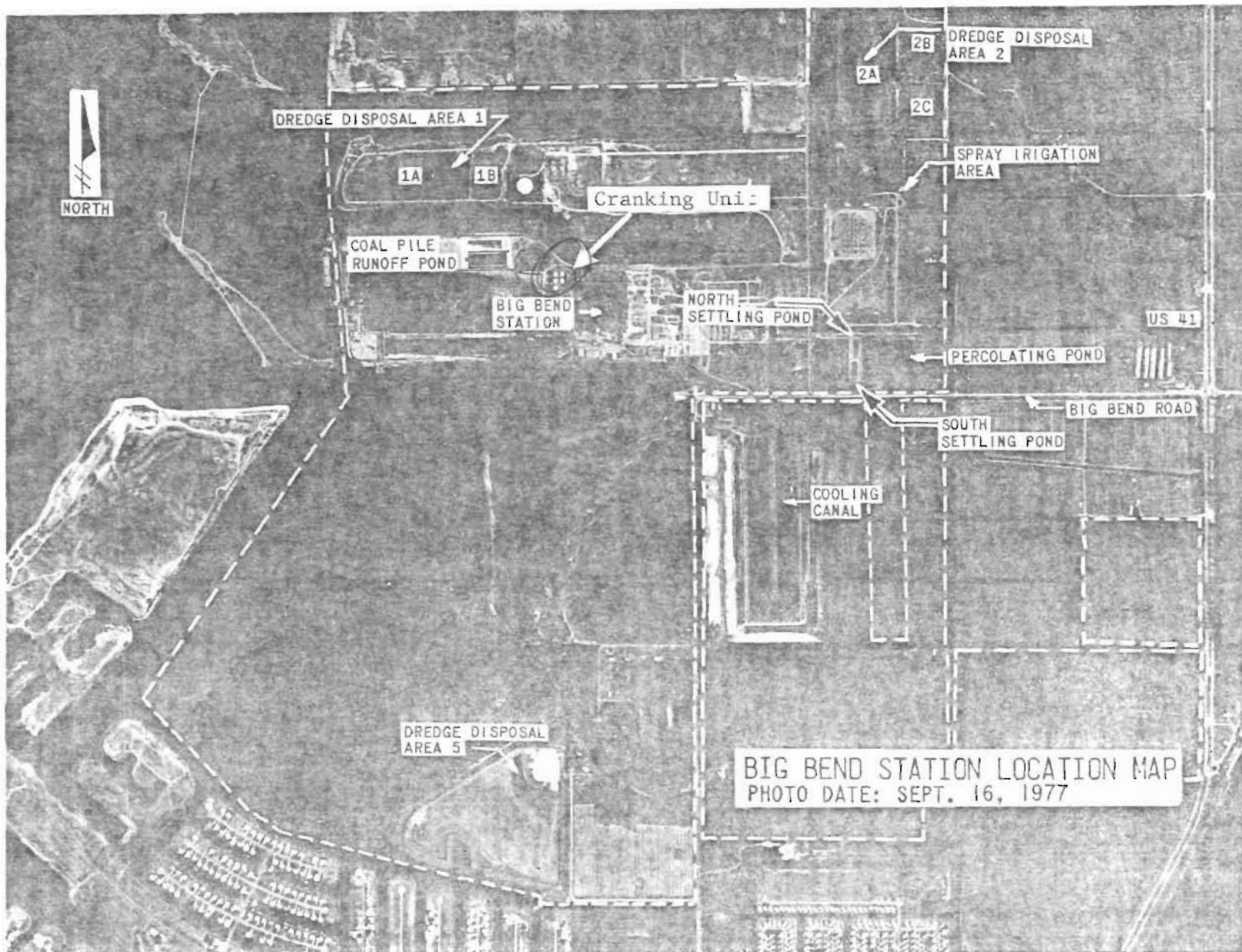
PERSONS CONTACTED-TITLE Hugh Smith, Chemist in Environmental Planning, Dave Gellerson

NEDS POINTS CHECKED 1 NEDS POINTS IN COMPLIANCE \_\_\_\_\_ NEDS POINTS IN VIOLATION \_\_\_\_\_

SUMMARY OF FINDINGS Gas turbine not operating. Mr. Gellerson is not aware of where the fuel flow meters are. Environmental controller is unable to be reached. Apparently he is not aware of my visit. Requested that I be notified immediately during a start-up.

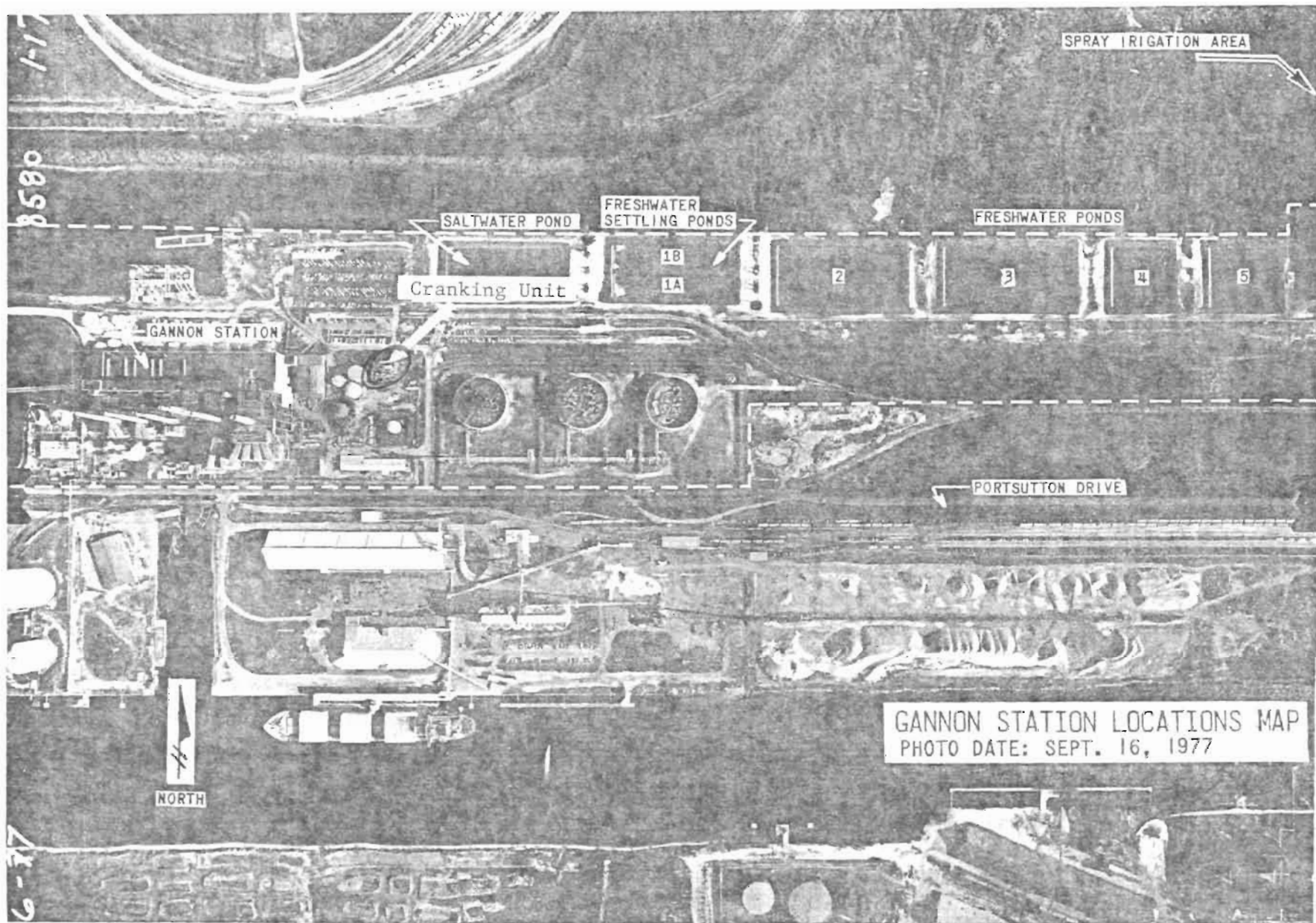
INSPECTION COMMENTS FOR APIS (LIMIT 50 SPACES) EMERGENCY UNIT. INOPERATIVE DURING VISIT.

INSPECTOR'S SIGNATURE Walter In Gert...



BIG BEND.

Figure 2.



GANNON.

Figure 2.



May 25, 1984

**D. E. R.**  
**MAY 30 1984**  
**SOUTH WEST DISTRICT**  
**TAMPA**

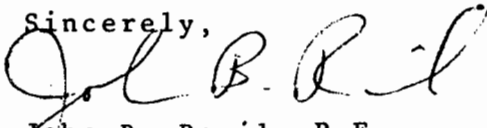
Mr. Victor San Agustin  
Environmental Engineer  
Hillsborough County Environmental  
Protection Commission  
1900 - 9th Avenue  
Tampa, FL 33605

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2. Stack dimensions - elevation . . . . . 35'  
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Sincerely,  
  
John B. Ramil, P.E.  
Manager  
Environmental Planning

JBR/tb

cc: ✓ Jim Estler

GANNON STATION COMBUSTION TURBINE  
OPERATION AND MAINTENANCE PLAN

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- clean crankcase breather
- check water level alarm

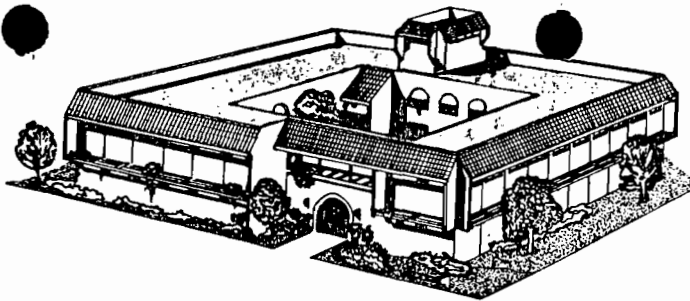
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Fuel flow is measured by a flow integrater and reported in the yearly emissions inventory.

HILLSBOROUGH COUNTY  
ENVIRONMENTAL PROTECTION

COMMISSION

E. L. BING  
RODNEY COLSON  
MATT JETTON  
JOHN R. PAULK  
JAN KAMINIS PLATT



ROGER P. STEWART  
DIRECTOR

1900 - 9th AVE  
TAMPA, FLORIDA 33805

TELEPHONE (813) 272-5960

April 26, 1984

D. E. R.

'APR 27 1984

Mr. Hugh W. Smith, Chemist  
Environmental Planning  
Tampa Electric Company  
Post Office Box 111  
Tampa, Florida 33601

SOUTH WEST DISTRICT  
TAMPA

RE: RENEWAL OF OPERATION PERMITS TO TWO (2) GAS TURBINES

Dear Mr. Smith:

The Hillsborough County Environmental Protection Commission acknowledges the receipt of the applications to renew air operating permits of two (2) 14 MW gas turbines. The permit numbers are A029-19056 and 19057.

As per our telephone conversation, please provide the following information for further processing of the permit applications:

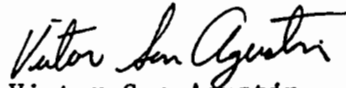
1. Are any of these two (2) gas turbines regenerative?
2. Stack dimensions for both turbines.
3. Section II of the 1983 Annual Operating Report requires average hours per week so that estimates of yearly emissions maybe obtained for all sources. Also, normal operating schedules, periods of seasonal and/or peak operations, and dates of annually occurring shut down of operations need to be provided. If normal operating schedules differ for each source, please note in a separate sheet. I am attaching copies of page 1 of the Annual Operating Reports for the three (3) stations. Please complete accordingly.
4. The power output of gas turbine #1 during the compliance test dated March 19, 1984. The gas turbine in question is located at the Gannon station.
5. With reference to gas turbine #1 at the Gannon station, an operation and maintenance plan is required pursuant to FAC 17-2.650(2)(g) and 17-2.650(2)(a). As specified, the plan shall contain "inspection and maintenance schedules including periodic assessments of the condition of and repair of instruments, auxiliary equipment, process covers, manholes, ducting, breaching...and other equipment, and a schedule for recording of performance parameter data."



RE: RENEWAL OF OPERATION PERMITS TO TWO (2) GAS TURBINES  
Page Two

I request your immediate attention to this matter as the permits involved expire in June 25, 1984. If you have any questions, please call me at 272-5960.

Sincerely,



Victor San Agustin  
Environmental Engineer  
Hillsborough County Environmental  
Protection Commission

VSA/ljh

cc: Jim Estler, F.D.E.R.

B. THOMAS



RECEIVED

MAR 27 1984

H.C.E.P.C.

March 26, 1984

#140 <sup>00</sup> 3/27/84  
fc

PAID  
H.C.E.P.C.

Mr. Roger P. Stewart  
Hillsborough County Environmental  
Protection Commission  
1900 - 9th Avenue  
Tampa, FL 33605

Richard B. Garrity, Ph.D.  
Florida Department of  
Environmental Regulation  
7601 Highway 301 North  
Tampa, FL 33610

D. E. R.

apr.

APR 02 1984

SS

Re: Gannon Station Gas Turbine Cranking Unit --  
Air Operating Permit Renewal

SOUTH WEST DISTRICT

Gentlemen:

Please find enclosed the original and four (4) copies of the renewal application for the air operating permit for Tampa Electric Company's F.J. Gannon Station Gas Turbine Cranking Unit. This application is for the renewal of permit number A029-19057.

Additionally, enclosed please find a Florida Certificate of Good Standing and a Letter of Authorization. The application, together with a check for \$100 to the Florida Department of Environmental Regulation and a check for \$140 to the Hillsborough County Board of County Commissioners is included with Mr. Stewart's copy.

If you have any questions, please call.

Sincerely,

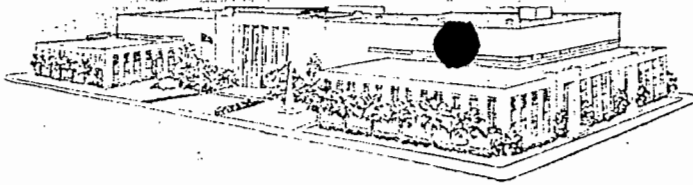
John B. Ramil, P.E.  
Manager  
Environmental Planning

D. E. R.

APR 02 1984

JBR/tb  
Enclosure

SOUTH WEST DISTRICT  
TAMPA



MEMORANDUM

Date May 11, 1979

To Dan Williams, DER

From Joe Griffiths, Env. Prot. Comm.

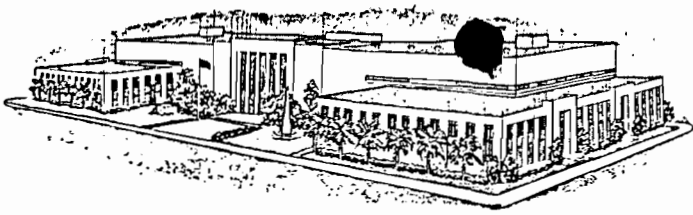
Subject: Air Permits

Transmitted this date the following to DER:

TECO - Gannon Cranking Unit; 5 year permit with annual V.E. requirement  
Big Bend Cranking Unit; 5 year permit with annual V. E. requirement.

Nitram - The No. 7 and No. 2 Prill Towers; 5 year permit with annual  
particulate and V. E. requirement.

JG/fd



OUNTY HILLSBOROUGH

MEMORANDUM

Date 4/6/79

To Dan Williams-DER

From Vilma Brueggemeyer-EPC-Air Engineer

Subject: TRANSMITTAL OF AIR PERMIT APPLICATION

Transmitted to DER this date the following:

1 air permit application for TECO's Gannon Station-Cranking Unit.

1 air permit application for TECO's Big Bend Station-Cranking Unit.

These are accompanied by check #1-35895 in the amount of \$40.00.

VB/rr

**D.E.R.**  
APR 10 1979  
SOUTHWEST DISTRICT  
TAMPA