



TAMPA ELECTRIC

March 19, 1998

Mr. Lenon Anderson
Title V Section
Florida Department of Environmental Protection
Twin Towers Office Building
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via FedEx
Airbill No. 800926219607

**Re: Tampa Electric Company
F. J. Gannon Station
Draft Title V Air Operation Permit
FDEP File No. 0570040-002-AV**

Dear Mr. Anderson:

Please find enclosed TEC's detailed comments regarding the above referenced draft Title V permit. As we discussed, the SO₂ modeling analysis will be submitted under separate cover. In addition, TEC requests that all test windows be ninety (90) days and Gannon Units 1-6 test windows correspond with the Acid Rain RATA testing requirements as follows:

<u>Emission Unit</u>	<u>Annual Date</u>	<u>Frequency</u>
Gannon Unit 1	1st Quarter	Annually
Gannon Unit 2	3rd Quarter	Annually
Gannon Unit 3	4th Quarter	Annually
Gannon Unit 4	2nd Quarter	Annually
Gannon Unit 5	1st Quarter	Annually
Gannon Unit 6	1st Quarter	Annually

Please feel free to telephone me at (813) 641-5039, if you have any questions. Thank you.

Sincerely,

Janice K. Taylor
Senior Engineer
Environmental Planning

EPgmVKT830

Enclosure

c/enc: Mr. Scott Sheplak, FDEP-Tallahassee
Mr. Jerry Kissel, FDEP-SW District
Mr. Richard Kirby, EPCHC -
Via FedEx Airbill No. 5060867851

xc: Al Unno

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**TAMPA ELECTRIC COMPANY
COMMENTS REGARDING THE TITLE V AIR OPERATION PERMIT FOR
F.J. GANNON STATION
FDEP FILE NO. 0570040-002-AV**

Table of Contents

TEC Comment 1:

TEC requests the following change to the Table of Contents:

III. Emissions Units and Conditions

...

E. ~~Coal~~ Fuel Yard

Section I. Facility Information.

TEC Comment 2:

TEC requests the following changes to Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions:

- 008 ~~Fuel~~ Fuel Coal Yard. . .
- 013 Unit No. 1 ~~Fuel~~ Fuel Coal Bunker with Roto-Clone
- 014 Unit No. 2 ~~Fuel~~ Fuel Coal Bunker with Roto-Clone
- 015 Unit No. 3 ~~Fuel~~ Fuel Coal Bunker with Roto-Clone
- 016 Unit No. 4 ~~Fuel~~ Fuel Coal Bunker with Roto-Clone
- 017 Unit No. 5 ~~Fuel~~ Fuel Coal Bunker with Roto-Clone
- 018 Unit No. 6 ~~Fuel~~ Fuel Coal Bunker with Roto-Clone

Section II. Facility-wide Conditions.

TEC Comment 3:

Consistent with the previously issued Title V Air Operations Permit for Hookers Point Station, TEC requests the Appendix E-1, List of Exempt Emissions Units and/or Activities, as cited in Condition 5, be modified as follows to include:

- 13. Storage tanks less with than 550 gallons capacity
- 14. Inorganic substance storage tanks with 550 gallon or greater capacity and not containing a hazardous air pollutant (HAP)
- 15. No. 2 fuel oil storage tanks
- 16. Equipment used for steam cleaning

17. Turbine vapor extractors

TEC Comment 4:

TEC requests Condition 7 be changed as follows:

- (a) Attend to accidental spills (solid fuel coal and fly ash) promptly and effectively.

TEC Comment 5:

TEC requests Condition 7(b) be deleted. The specific conditions for each steam generator include required reasonable precautions to minimize particulate matter emissions. Condition 7(b) duplicates these requirements with less specific language that could cause confusion.

TEC also notes that the cited underlying rule for Condition 7(b), 62-296.320(4)(c)(2), F.A.C., applies to unconfined particulate matter emission sources. This rule is not applicable to the steam generators because these emissions units are confined particulate matter emission sources.

Section III. Regulated Emissions Units Conditions

TEC Comment 6:

TEC requests that Emission Unit 3 description be clarified as follows because the heat recovery system is no longer in service:

.... and is of the cyclone firing type, ~~equipped with an optional flue gas recirculation (heat recovery) system to maintain steam temperature at low loads.~~

TEC Comment 7:

The subsection A permitting note references these units as Phase I Acid Rain units. These units are regulated under the Phase II Acid Rain rules only.

TEC Comment 8:

TEC requests that all emission units listed in Subsections A, B and C be combined into Subsection A. This consolidation will clarify the specific permit condition requirements for these emission units as well as streamline the permit. TEC believes this approach is appropriate because these units have the same basic method of operations.

TEC Comment 9:

TEC requests Condition A.1 be changed as follows:

The maximum permitted heat input rate on a monthly average basis for each unit is as follows: . . .

TEC Comment 10:

TEC requests Condition A.2 be changed to read as follows to recognize that coal and ignition oil are jointly burned, to allow for the injection of nonhazardous boiler cleaning waste, and to allow on-specification used oil (including oily soil) combustion during normal operations:

- (a) Normal operation: The only fuels allowed to be burned are coal and on-specification used oil.
- (b) Startup; shutdown; malfunctions: In addition to the fuels allowed to be burned during normal operations, each unit may also burn new No. 2 fuel oil during startup, shutdown and malfunctions. This includes but is not limited to the emission unit, a new cyclone/mill or combustion stabilization.
- (c) The injection of nonhazardous boiler chemical cleaning waste is allowed in each unit.

TEC Comment 11:

Consistent with the existing operating permits for F.J. Gannon Station, TEC requests the following statement be added to Condition A.3:

A test under sootblowing conditions which demonstrates compliance with a non-sootblowing limitation will be accepted as proof of compliance with that non-sootblowing limitation.

In addition, TEC requests that only one visible emissions test be done under sootblowing conditions. TEC believes duplicate testing provides no environmental benefit.

TEC Comment 12:

TEC requests Condition A.4 be changed as follows to clarify design fuel consumption rates:

A. Process System Performance Parameters:

1. Source Designator: Units Nos. 1-6

2. Design Fuel Consumption Rate at Maximum Continuous Rating:

Unit	Tons/hr (fuel coal)	Fuel Heat Content (Btu/lb)
1	50	<u>12,570</u>
2	51	<u>12,570</u>
3	65	<u>12,300</u>
4	80	<u>11,699</u>

5	93.4	<u>12,227</u>
6	151.4	<u>12,543</u>

All Units:

On-specification used oil - 48 gallons per minute/per boiler; Max 1,000,000 gal/yr per station

Monthly Recorded or Inspection/Maintenance

~~Inspect insulator compartment heaters/blowers.~~

Units 1-4 Inspect insulator compartment heaters/blowers.

Units 5-6 Inspect penthouse pressurizing fan filters.

TEC Comment 13:

TEC requests Condition B.3 be eliminated because enforcing this condition is neither necessary nor practical. The quantity of SO₂ generated from on-specification used oil combustion is negligible compared to the quantity of SO₂ generated from coal combustion. Segregating and determining the quantity of SO₂ generated from the combustion of each fuel is not possible.

TEC Comment 14:

TEC requests Condition B.6 be changed to Condition A.6 and amended as follows because we believe it will provide clarity and we know of no regulatory requirement mandating recordkeeping completion.:

b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by TECO ~~the F.J. Gannon Station~~ in the production and distribution of electricity, not to exceed 1,000,000 gallons during any consecutive 12 month period.

e. Testing requirements*: The owner or operator shall sample and analyze each batch of used oil to be burned . . .

*Used oil parameters may be characterized by generator knowledge.

f. Record Keeping Requirements: The owner or operator....

(1) The gallons of on-specification used oil generated and burned each month. ~~(This record shall be completed no later than the fifteenth day of the succeeding month.)~~

(2) Consecutive 12-month period. ~~(This record shall be completed no later than the fifteenth day of the succeeding month.)~~

TEC Comment 15:

TEC requests the brief description of the combustion turbine in subsection D be clarified as follows:

This emissions unit is a simple cycle combustion turbine and is designated Combustion Turbine #1 7. . . .

TEC Comment 16:

TEC recommends Condition D.7 be changed as follows to promote clarity:

Excess emissions from this these emissions units resulting from . . .

TEC Comment 17:

TEC requests this condition D.9 be changed as follows:

The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis ~~provided by the vendor upon each fuel delivery~~ or by contract specifications.

TEC Comment 18

TEC requests Condition D.10 be deleted as unnecessary.

TEC Comment 19:

TEC recommends that Condition D.16 be changed as follows to promote clarity:

Visible Emissions Testing - Annual: By this permit, annual emissions compliance testing for visible emissions is not required ~~for those emissions units while burning e-~~ only liquid fuels for less than 400 hours per year.

TEC Comment 20:

TEC requests Condition D.22 be clarified as follows:

In order to document compliance with the visible emission testing exemption provided in Specific Condition No. D.16 D-5, ...

TEC Comment 21:

TEC requests the brief description of the fuel yard in Subsection E be clarified as follows:

-008 F.J. Gannon Station Fuel ~~Coal~~ Yard

For the operation of a fuel ~~bituminous coal~~ yard serving the F.J. Gannon Station boiler units 1 through 6, yard activities including barge (east and west) and railcar unloading of coal, truck/barge unloading of flux ~~limestone or iron ore~~, and transfer and storage

of these materials. The iron ore is shipped, stored, and handled in the same manner as limestone. . . .

<u>Source Designator</u>	<u>Particulate Control Method</u>	<u>Efficiency Rating at Design Capacity</u>	<u>Maximum Design Material Handling Rate (TPH)</u>
Barge to East Grab Bucket	Grab Bucket	-----	1500
East Grab Bucket to East Hopper	Side Enclosure	25%	1500
Barge to West-Continuous Unloader	Enclosure	40%	1500
Barge to West Grab Bucket	Grab Bucket	-----	1500
West Grab Bucket to West Hopper	Side Enclosure	25%	1500
...			
West Hopper to Feeder	-----		1500
...			
Live Limestone Fluxing Stockpile			

TEC Comment 22:

TEC requests Condition E.1 be clarified as follows:

Permitted Capacity: The maximum permitted process rate is 2.85 million tons/year of coal.

TEC Comment 23:

TEC requests Condition E.4 be deleted because demonstrating compliance with the stated condition is not possible.

TEC Comment 24:

TEC recommends specific Condition E.5., be deleted because the west grab bucket has been retired.

TEC Comment 25:

TEC requests Condition E.8 be clarified as follows:

B. Inspection and Maintenance Procedures:

The fuel coal yard particulate control equipment shall receive regular preventative maintenance as follows: . . .

TEC Comment 26:

TEC requests that Condition E.11 be deleted. All permit modification notifications will be submitted to FDEP, consistent with the Title V Air Operation Permit program.

TEC Comment 27:

TEC requests that Condition E.14 be deleted. This condition is no longer applicable to the fuel yard operations.

TEC Comment 28:

TEC requests that Condition E.15 be deleted. This condition is no longer applicable because the west grab bucket has been retired.

TEC Comment 29:

TEC requests the brief description of the Units 5-6 Fly Ash Silo (No. 1) in Subsection G be clarified as follows:

. . . In addition, fly ash from F.J. Gannon Station Units 1-4 Fly Ash Silo No. 2 (silo No. 2) may be routed via gravity flow to the pugmill where it is "conditioned" by wetting with water and gravity fed into open bed trucks. The fly ash is then transported to an off-site consumer. Fly ash may also be conveyed from tanker trucks to Fly Ash Silo No. 1 and from Fly Ash Silo No. 1 to Fly Ash Silo No. 2. . . .

TEC Comment 30:

TEC requests the brief description of the Units 1-4 Fly Ash Silo (No. 2) in Subsection H be clarified as follows:

. . . In addition, fly ash from silo No. 2 may be routed to the pugmill at F.J. Gannon Station Silo No. 1 where it is "conditioned" by wetting with water and gravity fed into open bed trucks. The fly ash is then transported to an off-site consumer. Fly ash may also be conveyed from tanker trucks to Fly Ash Silo No. 2 and from Fly Ash Silo No. 2 to Fly Ash Silo No. 1. . . .

TEC Comment 31:

TEC requests the brief description of the fuel bunkers with Roto-Clones in subsection I be clarified as follows:

For the operation of F.J. Gannon station Units 1-6 fuel ~~coal~~ bunkers with exhaust fan/cyclone collector (Roto-Clone) controlling dust emissions from each unit's respective bunker, two moving transfer stations via their respective conveyor belts fuel ~~coal~~ through enclosed chutes to each of the six bunkers. Fuel ~~Coal~~ bunkers No. 1-4 and 6 are each equipped with a 9,600 ACFM American Air Filter Company Type D Roto-Clone to abate dust emissions during ventilation. Fuel ~~Coal~~ bunker No. 5 is equipped with a 5,400 ACFM Type D Roto-clone. A number of vent pipes convey air from each bunker to a Roto-Clone during particulate removal. Particulate matter removed by the Roto-Clones is returned to a fuel ~~coal~~ bunker via a hopper and return line. Units No. 1-6 fuel ~~coal~~ bunkers are situated in a west to east fashion. Unit No. 1 fuel ~~coal~~ bunker is located furthest west and Unit No. 6 fuel ~~coal~~ bunker is located furthest east.

TEC Comment 32:

TEC requests Condition I.2 be clarified as follows:

. . . the maximum allowable particulate matter emission rate from each of the six fuel ~~coal~~ bunkers shall not exceed 0.99 ton/year.

TEC Comment 33:

TEC requests Condition I.3 be clarified as follows:

Visible emissions from each of the six fuel ~~coal~~ bunkers shall not be equal to or greater than 20% opacity.

TEC Comment 34:

TEC requests that Condition I.4 be deleted to avoid confusion because this requirement is adequately addressed in Subsection K.

TEC Comment 35:

TEC requests Condition I.5 be deleted because each rotoclone emits less than 1 tn/yr and therefore by regulations are exempt from RACT requirements.

TEC Comment 36:

TEC requests Condition J.6 be changed as follows:

Visible emissions shall not exceed 20 percent opacity, except for one ~~six~~ two-minute period per hour during which the opacity shall not exceed ~~27~~ 40 percent.

TEC Comment 37:

TEC notes that Condition J.19.2 contains a requirement c., but does not have an a. nor b. TEC requests the opportunity to review any missing permit conditions prior to permit finalization.

TEC Comment 38:

TEC notes that Condition J.21(a) does not contain a requirement 1. but does contain requirements 2. and 3. TEC requests the opportunity to review any missing permit conditions prior to permit finalization.

TEC Comment 39:

TEC requests that Condition J.22 be modified as follows:

The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery or by contract specified.

TEC Comment 40:

TEC requests that Condition J.30 be deleted. New No. 2 oil, which is fired only during startup, makes a negligible contribution to emissions from these emissions units. the cost of installing and maintaining new flow monitoring equipment is not justified by the benefit received.

TEC Comment 41:

TEC requests the portion of Condition J.33.e (reporting requirements) requiring the quarterly reporting to EPC be deleted because this requirement is unnecessary.

TEC Comment 42:

TEC requests the following changes to Subsection K. Common Conditions:

- 013 Unit No. 1 Fuel Coal Bunker with Roto-Clone
- 014 Unit No. 2 Fuel Coal Bunker with Roto-Clone
- 015 Unit No. 3 Fuel Coal Bunker with Roto-Clone
- 016 Unit No. 4 Fuel Coal Bunker with Roto-Clone
- 017 Unit No. 5 Fuel Coal Bunker with Roto-Clone
- 018 Unit No. 6 Fuel Coal Bunker with Roto-Clone

TEC Comment 43:

TEC requests Condition K.2. be clarified to include the rotoclones.

TEC Comment 44:

TEC requests Condition K.3. be modified to allow for the testing of two (2) rotoclones annually.