

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

DEC 1 9 2000

RECEIVED

DEC 2 6 2000

DIVISION OF AIR
RESOURCES MANAGEMENT

4APT-ARB

Howard L. Rhodes, Director Division of Air Resources Management FL Department of Environmental Protection Mail Station 5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400

SUBJ: EPA's Objection to Proposed Title V Permit for Tampa Electric Company - F. J. Gannon Station Permit Number 0570040-002-AV

Dear Mr. Rhodes:

The purpose of this letter is to acknowledge the receipt of the State of Florida's proposed changes to the Tampa Electric Company - F. J. Gannon Station proposed title V permit, dated December 4, 2000 (reissued with changes on December 14, 2000), which was the subject of a U.S. Environmental Protection Agency (EPA) title V objection on September 8, 2000. EPA Region 4 has completed its review of the proposed changes to the permit and believes that the State has adequately addressed each of the issues enumerated in the objection. Therefore, EPA considers the objection to be resolved. Once the state's proposed changes are incorporated into the permit, the State may proceed with permit issuance. Please note, however, that our opportunity for review and comment on this permit does not prevent EPA from taking enforcement action for issues that were not raised during permit review. After final issuance, this permit may be reopened if EPA or the permitting authority later determines that it must be revised or revoked to assure compliance with applicable requirements.

We commend the efforts of your staff for facilitating the resolution of the permit issues. If you have any questions about this letter, please contact Mr. Gregg Worley, Chief, Air Permits Section at (404) 562-9141.

Sincerely,

Winston A. Smith

Director

Air, Pesticides & Toxics Management Division

cc: Ms. Karen A. Sheffield, P.E.

Tampa Electric Company - F. J. Gannon Station

Barbara \ File



Department of Environmental Protection

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

David B. Struhs Secretary

December 14, 2000

Mr. R. Douglas Neeley, Chief Air and Radiation Technology Branch Air, Pesticides and Toxics Management Division USEPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8909

Re:

Proposed Changes to Satisfy EPA Objections

PROPOSED Title V Permit No.: 0570040-002-AV

F. J. Gannon Station

Dear Mr. Neeley:

This letter is to document changes that the Department proposes to satisfy EPA Region 4 objections to Florida's PROPOSED Title V permit 0570040-002-AV for the F. J. Gannon Station. These objections were detailed in a letter from EPA Region 4 dated September 8, 2000.

The changes proposed in this letter result primarily from correspondence with the permittee and past resolution to similar objections the EPA found acceptable. Hopefully these changes will allow Florida to issue the FINAL Title V permit for this plant. Please review the following proposed changes to the referenced permits. If you concur with our changes, we will issue the FINAL Title V permit with these changes.

As you know, the 90 day period ended **December 6**. All parties involved have been expeditiously seeking resolution of these issues. We feel that EPA's concerns have been adequately addressed and we look forward to issuing a final permit. Please advise as soon as possible if you concur with the specific changes detailed below. Please contact Mr. Scott M. Sheplak, P.E., at 850/921-9532, if you need any additional information.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

Attachments

cc:

Karen A. Sheffield, P.E. Gregory Neslon, TEC, D.R. J. James Hunter, TEC Thomas Reese, Esq. Gail Kamaras, LEAF

Thomas Davis, P.E., ECT Bill Thomas, SWD Jerry Campbell, EPCHC Pat Comer, Esq., DEP

Enclosure

Tampa Electric Company's Comments on the U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit Tampa Electric Company

F.J. Gannon Station Permit No. 0570040-002-AV

EPA Objection Issue 1

Federally Enforceable Requirements: Section II, conditions 6,7,11 and 12 are identified as "not federally enforceable." Conditions 6 and 7 are federally enforceable because they are contained in the federally approved portion of the Florida SIP. Conditions 11 and 12 address the requirement to provide compliance notifications and notification of potential permit modifications to the Environmental Protection Commission of Hillsborough County (EPCHC) and EPA, and provide the appropriate mailing addresses. Pursuant to 40 C.F.R. §70.6(c)(5)(iv), compliance certifications shall be submitted to the Administrator as well as to the permitting authority. Therefore, these conditions are also Federally enforceable since they are part of the required elements of a title V permit.

TEC Response

TEC is not opposed to making these conditions Federally enforceable.

Proposed Change:

The changes will be made.

EPA Objection Issue 2

Appropriate Averaging Times: The emission limits in conditions D.5, E.3, F.1, F.2, F.3, G.1, G.2, H.1, H.2, H.3, I.1, I.2, I.3, J.2, J.6, J.33.a, and K.2 do not contain averaging times. Appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. This deficiency may be addressed by including a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Based on review of the operating permits for F.J. Gannon Steam Generators No. 1 through No. 6, Region 4 recommends that condition J.2 specify an averaging time of two hours for particulate emissions from these units. Since the facility already uses this averaging time to evaluate compliance with the particulate matter limit for all but one of these units, the Department should include the same averaging time in the title V permit.

TEC Response

With regard to conditions D.5, E.3, F.2, F.3, G.2, G.3, H.2, H.3, I.2, I.3, J.2, J.6, and K.2, TEC suggests adding a clarifying note such as the following:

{Permitting Note: When not otherwise defined, averaging times for all specified emission standards shall be equal to the cumulative run time elapsed for all runs during the associated compliance test.}

Condition J.33.a(1) should be clarified by adding the words "on a hourly average basis" as follows:

- a. Quantity Limitation: The input rate per boiler shall not exceed:
 - (1) 50 gal/min on an hourly average basis.

Conditions F.1, G.1, H.1, and I.1 should be addressed as noted below in the response the Issue 4.

In response to EPA recommendation "that condition J.2 specify an averaging time of two hours for particulate emissions from these units", TEC disagrees and suggests that the above permitting note is the most appropriate method of resolving this issue.

Proposed Change:

The following permitting note will be added after conditions D.5, E.3, F.1, F.2, F.3, G.1, G.2, H.1, H.2, H.3, I.1, I.2, I.3, J.2, J.6, and K.2:

{Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

Condition J.33.a(1) will be clarified by adding the words "on a hourly average basis" as follows:

- b. Quantity Limitation: The input rate per boiler shall not exceed:
 - (1) 50 gal/min on an hourly average basis.

The requirement for a two-hour averaging time for particulate matter from the boilers has never been in a federally-enforceable permit. Its inclusion in an operating permit was based on Rule 17-2.600(5)(a)2., F.A.C. This rule no longer exists in our State Implementation Plan.

EPA Objection Issue 3

<u>Compliance Assurance – Excess Emissions:</u> Section III, conditions A.6, B.7, and C.5 allow TECO to bypass the ESP's and vent emissions from the slag tanks directly to the atmosphere, for the purposes off providing worker safety during maintenance, and to prevent equipment damage in the case of a loss of flow through the normal duct system to the ESP. While EPA Region 4 recognizes that such ventings may be necessary in limited circumstances, these conditions, as written, are overly broad for the circumstances they are intended to cover and appear to

automatically exempt all events from the slag tanks. An automatic exemption from enforcement, such as this, is known as a "No Action" Assurance. No action assurances are expressly prohibited by EPA (Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring, Policy Against "No Action" Assurances, November 16, 1984). The decision as to whether or not any particular excess emission event may or may not be allowed should be left up to the discretion of the FDEP and EPCHC, and should be evaluated on a case by case basis.

In addition, this excess emissions variance appears to conflict with the circumvention prohibition under 62-210.650, F.A.C., which states that "No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly." While Florida regulations allow FDEP to extend the duration of excess emissions under 62-210.700(5), F.A.C., there does not appear to be a similar variance allowed for the circumvention prohibition referenced above. In addition, slag tank venting to prevent equipment damage due to loss of flow through the normal duct system to the ESP appears to fall under existing malfunction provisions of the excess emissions requirements, so it is unclear why a specific variance is provided. Furthermore, item (b) of these conditions appears to limit the duration of these events to two-hours, as does the excess emissions rules, so the utility of a separate condition is also unclear.

Finally, one portion of this condition does not make sense as it is written. This portion of the condition states:

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of on slag tank volume per each emergency to correct the situation in a timely manner, not to exceed two hours.

It appears as through this is a run-on sentence. The first part of the sentence, that requires the reporting of excess emissions of greater than one slag tank volume, appears to have been combined with a sentence that requires excess emissions to be corrected in a timely manner, and that does not allow excess emissions to exceed two hours. This portion of the condition should be changed so that it is clearer to the reader.

TEC Response

TEC agrees that conditions A.6, B.7, and C.5 may be confusing as written and may overly addresses the issue of purging the slag tanks to ensure worker safety during maintenance or to prevent equipment damage due to loss of flow through the normal duct system. Since the frequency of events requiring purging of the slag tanks through the emergency vents is low and the volume of potential emissions minimal, this issue may be best addressed by adding the following to the "List of Insignificant Emissions Units and/or Activities" in Appendix I-1 of the permit.

The operation of slag tank purge vents to vent emissions to the atmosphere only for the purposes of worker safety during maintenance or to prevent equipment damage due to

loss of flow through the normal duct system to the electrostatic precipitator.

If the above resolution is not adopted, TEC requests that some alternative be reached to address this activity. If the existing language is kept, the language identified by the EPA as not making sense should be corrected by inserting the underlined language as noted below.

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of one slag tank volume per each emergency maintenance job. TEC shall make a good faith effort to correct the situation in a timely manner, not to exceed two hours.

Proposed Change:

Conditions A.6, B.7, and C.5. will be deleted. The "purging of slag tank vents" activity will be added to Appendix I-1. The following language is added to Appendix I-1, List of Insignificant Emissions Units and/or Activities:

22. The operation of slag tank purge vents to vent emissions to the atmosphere only for the purposes of worker safety during maintenance or to prevent equipment damage due to loss of flow through the normal duct system to the electrostatic precipitator.

EPA Objection Issue 4

Periodic Monitoring: As outlined below, the proposed title V permit for the F.J. Gannon Station does not contain adequate periodic monitoring requirements to assure compliance with all emissions and operational limits contained in the permit. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. 40 C.F.R. Part 70.6 (a)(3)(i)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to assuring compliance, a system of periodic monitoring should also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, periodic monitoring requirements sufficient to assure compliance with all permit limits must be incorporated in the permit or a technical demonstration must be included in the statement of basis explaining the rationale for the approach used by the Department to address periodic monitoring requirements for these units.

a. Maximum Operating Rates: Conditions F.1, G.1, H.1, and I.1 specify the maximum operating rates for fly ash and fuel handling equipment identified as, EU-009, EUs – 010 and –012, EU-011, and EUs –13 through –018, respectively. However, the permit does not provide for periodic monitoring sufficient to assure compliance with these operating rate limitations. For other units included in this permit, there is a permitting note clarifying that these conditions are not included as limits, but as a basis for determining the percent capacity of the units during source testing (see A.1, and B.1). Please add periodic monitoring provisions to the permit to address conditions F.1,

- G.1, H.1, and I.1, or add clarifying language to discuss why these conditions are not included as limits.
- b. <u>Normal Operating Temperature</u>: Conditions J.33.b and J.34.d only allow boiler cleaning waste and used oil, respectively, to be fed to boilers 1 through 6 if these units are operating at "normal source operating temperatures."

TEC Response

In response to 4.a above, TEC suggests that a clarifying note, similar to the following, be included in each of the identified conditions.

{Permitting note: The material loading limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. Regular record keeping is not required for material loading. Instead the owner or operator is expected to determine material loading whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emission tests. Material loading determinations may be based on best engineering evaluation of the operating requirements necessary to achieve 90 to 100 percent of the rated loading, unless such operating conditions are otherwise specified by permit condition.}

In response to 4.b above, TEC suggests that the language in the identified conditions is appropriate and complete. Additional periodic monitoring of "normal source operating temperatures" is inconsistent with other permits that contain this identical language. Therefore, TEC requests that conditions J.33.b and J.34.d, as well as any related conditions, remain as they appear.

Proposed Change:

Changes will be made per TEC's suggestions.

EPA Objection Issue 5

Applicable Requirements – Consent Decree: The Gannon permit requires TECO to comply with the Consent Decree (CD) entered into between the United States and TECO on February 29, 2000; however, the specific terms and conditions of the Consent Decree have not been incorporated into the permit. Part 70.6(a)(1) requires a title V permit to include those operational requirements and limitations that assure compliance with all applicable requirements at the time of the permit issuance. Where necessary, 70.5(c)(8) requires a permit to include a schedule of compliance that is at least as stringent as that contained in any judicial consent decree, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. Therefore, the text of this permit should be reworked to incorporate the terms and conditions of the Consent Decree. Further, because the permit and the

Consent Decree contain so many related provisions, facility personnel would benefit from having all the relevant requirements included in one document. For example, EPA Region 4 recommends that at least the following changes/additions be incorporated into the permit:

a. The consent decree requires that at least 200 MW of coal-fired generating capacity at the Gannon Station be repowered by 5/01/03, and that at least the difference between 550 MW of coal-fired generating capacity and the amount of coal-fired generating capacity that was repowered prior to 5/01/03, be repowered by 12/31/04. In addition, all coal-fired boilers (six units totaling 1194 MW) at the Gannon Station are to be shut down by 12/31/04, and no combustion of coal is allowed at the plant after 1/01/05. These shut down units are allowed to be kept in reserve/standby if not repowered. However, if the reserve/standby units are ever to be restarted, then a PSD permit is required prior to the restart.

The consent decree has left TECO the latitude to determine which units to repower, which units to leave in reserve/standby, the exact schedule of repowering and shutdown, etc. Therefore, the permit does not need to specify which units are to be repowered/shutdown, or specify anything concerning the new emission units that will be constructed as a result of the repowering projects (emission limits, controls, etc.), until TECO applies to amend the permit when required to do so. However, the general requirements (minimum MWs to be repowered, shutdown of remaining units, no further combustion of coal, etc.) should be included in the permit, because these are requirements of a federally enforceable consent decree that will not change, and will take effect within the five year time period prior to permit expiration.

- b. Change the renewal application due date to January 1, 2004 and the expiration date to December 31, 2004. Paragraph 42 of the CD requires TECO to submit a permit application or request an amendment to the existing permit no later than January 1, 2004. Paragraph 28 of the CD requires TECO to stop burning coal at any unit at Gannon no later than January 1, 2005.
- c. Change paragraphs A.2, B.2 and C.2 to reflect TECO's commitment to stop burning coal no later than January 1, 2005 by including a statement that it will be switching fuels to only use natural gas no later than January 1, 2005.
- d. The permit should clearly reflect TECO's commitment, as outlined in Paragraph 46 of the CD, to either use its emission allowances internally or give them up. It does not appear to do so at all.

TEC Response

TEC is not opposed to incorporation of a condition identifying the Consent Decree requirement referenced in 5.a above, as long as the language is consistent with that found in the Consent Decree.

TEC does not agree with the suggested date changes identified in 5.b above. Since the Consent Decree allows TEC to submit a permit application <u>or</u> amend the existing permit by January 1, 2004, there is no need to change the "renewal application" or "expiration" dates found in the permit.

TEC is not opposed to the suggestion in 5.c above to modify conditions A.2, B.2 and C.2 to reflect the commitment to stop burning coal at these units; however, TEC is opposed to any statement that goes beyond the commitment to stop using coal, such as that suggested by EPA that TEC will "only use natural gas".

With regard to the emission allowance comment in 5.d above, TEC is not opposed to including a permit condition to incorporate the appropriate requirements of the Consent Decree, as long as the language is consistent with that found in the Consent Decree.

Proposed Change:

- 1. The Consent Final Judgement and the Consent Decree are specifically attached to the permit (see the "placard" page where attachments to the permit are listed under "Referenced attachments made a part of this permit:". For consistency purposes, clarifying language will be added to clearly indicate the attachments are part of this permit. To clarify that several terms and conditions of the Title V permit are superceded by the agreements, clarifying language will be added to facility-wide condition 9. The condition will be changed
- From: 9. The permittee shall comply with the Consent Final Judgement (DEP vs. TECO) dated December 6, 1999, and the Consent Decree (U.S. vs. TECO) dated February 29, 2000. [Rules 62-4.070(3)&(5) and 62-213.440, F.A.C.]
- **To:** 9. The Consent Final Judgement (DEP vs. TECO) dated December 6, 1999, and the Consent Decree (U.S. vs. TECO), dated February 29, 2000, are attached hereto and made a part of this permit. The permittee shall comply with the Consent Final Judgement and the Consent Decree. Wherever the Consent Decree conflicts with this permit the terms and conditions of the Consent Decree control. Upon expiration of the Consent Decree the Title V permit shall be modified to incorporate any terms and conditions that are deemed necessary by the permitting authority for the continued operation of the facility. [Rules 62-4.070(3)&(5) and 62-213.440, F.A.C.]
- 2. The permit renewal application date is not changed.

EPA Objection Issue 6

Acid Rain Requirements: The following items from Section IV, Phase II Acid Rain Part, must be corrected in order to make the requirements consistent with the Acid Rain regulations applicable to this facility:

- a. Phase II of the Acid Rain Program began on January 1, 2000, which is the date by which initial Phase II permits for existing phase II units are to be effective (40 C.F.R. 72.73(b)(2), "State Issuance of Phase II Permits"). However, the effective date proposed for the title V permit containing the Phase II Acid Rain Part for the F.J. Gannon Station is January 1, 2001. The permit needs to clarify that the effective period for the Phase II Acid Rain Part is five years beginning January 1, 2000.
- b. Section IV. "Phase II Acid Rain Part", lists the Acid Rain, Phase II SO₂ allowance allocations for the F.J. Gannon units GN03, GN04, GN05 and GN06 for the years 2001 through 2005. The SO₂ requirements under the Acid Rain Program are effective beginning January 1, 2000, therefore, the permit needs to be revised to include the allowance

allocation s for these units for the year 2000.

- c. Section IV. "Phase II Acid Rain Part", contains the Phase II NO_x limitations for the years 2001 through 2004 for the F.J. Gannon units GN03, GN04, GN05 and GN06. The Phase II NO_x Averaging Plan submitted by the source (signed December 20, 1999) indicates that the plan is to be effective for the years 2000 through 2004. The permit needs to be revised to include NO_x limits for the year 2000. In addition, since the proposed expiration date of the Title V permit is December 31, 2005, the permit will need to be revised to include Phase II NO_x emission limits for the year 2005. The permits will also need to contain a Phase II NO_x Compliance Plan submitted by the source indicating how the source plans to comply with the Phase II NO_x emission limits for the year 2005.
- d. The heat input value specified under the NO_x limits for the units GN03, GN04 do not match those specified in the Phase II NO_x Averaging Plan submitted by TECO. Please revise the Phase II Acid Rain Part of the permit to be consistent with the Averaging Plan.

TEC Response

TEC agrees that Phase II of the Acid Rain Program began on January 1, 2000. In addition, it is TEC's position that regardless of the effective date of the Acid Rain Part of the Title V permit, that TEC is in compliance with, and operating under the terms of, the Acid Rain Program regulations and the Acid Rain Permit application and associated compliance plans.

TEC agrees that if the Acid Rain Part has an effective date of January 1, 2000 that the SO₂ allowance allocations for the year 2000 need to be included. In addition to the four units identified in 6.b above, Units GN01 and GN02 also need to have SO₂ allowance allocations specified for the year 2000.

TEC agrees that the NO_x Averaging Plan referred to in 6.c above is effective for the years 2000 through 2004 and that if the Acid Rain Part has an effective date of January 1, 2000 that it should include the NO_x limits for the year 2000. TEC also notes that if the Acid Rain Part is extended from 2000 through 2005 that it will cover six years, which is in apparent conflict with the requirement that Acid Rain Permit are effective for five years.

TEC agrees with the comment in 6.d above. The heat input value for GN03 should be changed from "8,550,000" to "8,500,000" and the value for GN04 should be changed from "7,550,000" to "7,500,000".

Proposed Change:

The expiration date of the Title V permit will be changed from December 31, 2005 to December 31, 2004 so that the Title V permit will be in sync with the NOx averaging plan submitted by Tampa Electric. The SO₂ allowance table will be changed to show the allowances for years 2000 to 2004 instead of years 2001 to 2005. The NOx language will be changed to the following:

"Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NOx emissions averaging plan submitted on 12/22/99 for this unit. Under the plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.74 lb/mmBtu. In addition, this unit shall not have an annual heat input less than 23.000,000 mmBtu." (Information that is underlined will vary depending on the particular unit.)

The heat input value for GN03 will be changed from "8,550,000" to "8,500,000" and the value for GN04 will be changed from "7,550,000" to "7,500,000".

General Comments

TEC understands that items addressed in this "General Comments" section are informational in nature only and are not issues that will result in an objection if left unresolved. As such, comments are provided only where appropriate.

General Comment 1

<u>General Comment</u> – Please note that EPA reserves the right to enforce any noncompliance, including any noncompliance related to issues that have not been specifically raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.

TEC Response

No comment.

Proposed Change:

The department acknowledges the comment.

General Comment 2

<u>Placard Page – Acid Rain:</u> The "Referenced attachments made part of this permit," should include the Phase II Acid Rain Part application referred to in Section IV of the permit (Phase II SO2 Acid Rain Application/Compliance Plan received December 26, 1995).

TEC Response

No comment.

Proposed Change:

The change will be made.

General Comment 3

Section II. Condition 10: 40 C.F.R. Part 70.6 (c)(5)(iii) lists the necessary components of a Title V compliance certification, and requires that those components be included in the Title V permits. While Facility-Wide Condition # 10 of the permit does require that the source submit an annual compliance certification, the condition does not specify that the permit should specifically state that the source is required to submit compliance certifications consisting of the required components. Further, those required components should be listed in the permit.

In this case the list from 40 C.F.R. Part 70.6 (c)(5)(iii) is contained at Appendix TV-3. While it

is sufficient to include the list in an Appendix to the permit, the required compliance certification components should at least be mentioned in the permit at the condition requiring the source to submit a Title V compliance certification to EPA. This will allow the requirement to be clear and enforceable. Therefore, Facility-Wide Condition # 10 of the permit should mention the required components listed at 40 C.F.R. Part 70.6 (c)(5)(iii), and reference the list contained at Appendix TV-3.

TEC Response

No Comment.

Proposed Change:

No change will be made.

General Comment 4

Section III, Condition A.2.b. B.2.b. and C.2.b: These conditions cover the methods of operation for Steam Generators No. 1 through No. 6, and state that new No. 2 fuel oil may be burned during startup, shutdown and malfunctions, and "includes, but is not limited to the emission unit, a new cyclone/mill or flame stabilization." Please explain what the "new cyclone/mill" is and how it is associated with the facility.

TEC Response

The term "new cyclone/mill" in this condition refers to the placement into service, or removal from service, of an additional existing fuel mill feeding the boiler or an individual cyclone in the case of the cyclone boilers. The addition or removal of these pieces of equipment is necessary as the load of the unit moves up and down. The reference to "new" is not intended to refer to equipment that is not currently a part of these units.

Proposed Change:

See TEC's response. No change to the permit.

General Comment 5

Section III. Condition A.5.c.i.: This condition references the maximum percentage of wood derived fuel (W.F.) allowed to be ciphered with coal in Unit No. 3, which is "based on the W.F. blend ration (6.3%) + 10% = 7%." It is unclear how the 7 percent value was established given this calculation. Please clarify how the temporary 7 percent limit was calculated and revise this condition as appropriate.

TEC Response

The intent of this condition was to allow a blend ratio of 110% of the tested rate of 6.3%. This could be clarified as follows:

$$(6.3\%) + 10\%(6.3\%) = 7\%$$
 or $110\%(6.3\%) = 7\%$

Proposed Change:

The change will be made per TEC's suggestion.

General Comment 6

Section III. Condition E.1 Subsection E contains the permit conditions that are applicable to the fuel yard. Condition E.1 limits the twelve month throughput of coal and auxiliary fuel, consisting of TDF and W.F. (W.F. has been defined in the permit as "Wood Derived Fuel", and EPA Region 4 assumes that TDF stands for "Tire Derived Fuel"). While subsections of the permit pertaining to particular emission units did contain conditions that allow the combustion of W.F., none of the conditions for these emission units mentioned anything about allowing for the combustion of TDF. If TDF is to be combusted in any of the emission units at this facility, then the permit conditions that specify the authorized fuels must state that TDF is allowed to be burned. Further, any applicable limits related to the combustion of TDF must also be included in the permit.

TEC Response

The term "TDF" in this condition does refer to "Tire Derived Fuel". TEC is aware that TDF is not currently allowed to be burn at the facility and that additional permitting will be necessary to allow for the burning of this auxiliary fuel.

Proposed Change:

The acronym TDF (Tire Derived Fuel) will be spelled out in the condition. The handling of alternate fuels (i.e., TDF) is authorized by permit number 0570040-006-AC.

General Comment 7

<u>Section III.</u> Condition E.7: This condition refers to the limitations in condition E.3. Please verify whether this condition should reference condition E.4 instead.

TEC Response

TEC agrees that the reference should be changed from "E.3" to "E.4".

Proposed Change:

The change will be made.

General Comment 8

<u>Section III.</u> Condition E.10: This condition refers to the emissions discussed in condition E.6. Please verify whether this condition should reference condition E.3 instead.

TEC Response

TEC agrees that the reference should be changed from "E.6" to "E.3".

Proposed Change:

The change will be made.

General Comment 9

Periodic Monitoring: As you are aware, on April 14, 2000, the U.S. Court of Appeals for the D.C. Circuit issued an opinion addressing industry's challenge to the validity of portions of EPA's periodic monitoring guidance. See, Appalachian Power Co. v. EPA. No. 98-1512 (C.C. Cir., April 14, 2000). The Court found that "State permitting authorities [] may not, on the basis of EPA's guidance or 40 C.F.R. 70.6(a)(3)(i)(B), require in permits that the regulated source conducts more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test." While the permit contains testing from "time to time", as discussed in the court opinion, EPA does not consider these conditions sufficient to ensure compliance. In light of the court case, EPA is withholding formal objection regarding the adequacy of the periodic monitoring included in the permit for the following pollutants: Visible Emissions (VE) and Particulate Matter (PM). EPA's concerns are outlined below:

Visible Emissions: The permit does not contain adequate periodic monitoring for visible emissions to demonstrate compliance with the limits specified in the conditions D.5, E.3, F.2, G.2, H.2, I.3, or K.2. Although the source is required to perform an annual method 9 test for each emission unit, a test only once per year will not be sufficient to assure that the visible emission standard for each emission unit has been complied with on a continuous basis. This is especially true for several of the emission units that are subject to a relatively stringent visible emissions standard (i.e. no more than 5 % opacity is allowed). It was noted, however, that Operation and Maintenance (O&M) Plans for Particulate Matter have been established for many of these units (see conditions E.9, F.5, G.5, and H.5) and that non-title V operating permits contain O&M plans for the units covered under subsections D and I. One option to resolve this comment would be to include language in the permit which creates an enforceable link between the O&M activities and the associated VE limits in the above-reference permit conditions, such that the visual inspections/observations required in the O&M plans would qualify as periodic monitoring. Another option would be to include new conditions in the permit to require the source to perform and record the results of a qualitative observation of opacity over a specified frequency for each emission unit that is subject to a visible emission standard. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted within 24 hours of the qualitative survey. As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the VE emission limitations for these units. The

demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year

b. Particulate Matter: The permit does not contain adequate periodic monitoring for particulate matter emissions to demonstrate compliance with the limits specified in conditions F.3, G.3, H.3, I.2, or J.2. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided.

While the permit does include parametric monitoring of emission unit and control equipment operations in the O&M plans for these units (see conditions A.4, B.5, C.4, F.5, G.5, and H.5), the parametric monitoring scheme that has been specified is not adequate. The parameters to be monitored and the frequency of the monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of the normal operating time. The Department should set the appropriate percentage of the operating time that would serve as trigger for this testing requirement.

As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the PM emission limitations for these units. The demonstration needs to identify the rational for basing the compliance certification on data from a short-term test performed once a year.

c. Particulate Matter: Condition I.2 contains particulate matter limits of 0.99 tons per year and 0.19 pounds per hour for each of the six fuel bunkers and rotoclones. This condition exempts these units from the provisions of the particulate matter RACT, which is allowed under 62-296.700(2), by limiting emissions from each unit to less than one ton per year. However, the permit does not provide a means to ensure that particulate matter emissions actually remain below this threshold. Condition I.5 states that these units are also subject to the Common Conditions outlined in Subsection K, and condition K.2, allows for compliance with a five percent visible emissions limit in lieu of particulate matter stack testing for units equipped with a baghouse. Since the fuel bunkers covered under Subsection I are not equipped with baghouses, the allowance in condition K.2 does not appear to apply for these units. There is also a visible emissions limit of 20 percent in condition I.3. To resolve this issue, please provide discussion in the statement of basis which gives assurance that emissions from these units qualify for the exemption, and demonstrate that sufficient monitoring is provided in the permit to assure compliance with the particulate matter limit.

TEC Response

TEC feels that adequate periodic monitoring has been incorporated into the permit conditions and that additional monitoring requirements are not warranted.

Proposed Change:

No change will be made.



Department of Environmental Protection

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

David B. Scrubs Secretary

December 4, 2000

Mr. R. Douglas Neeley, Chief Air and Radiation Technology Branch Air, Pesticides and Toxics Management Division USEPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8909

Re:

Proposed Changes to Satisfy EPA Objections

PROPOSED Title V Permit No.: 0570040-002-AV

F. J. Gannon Station

Dear Mr. Neeley:

This letter is to document changes that the Department proposes to satisfy EPA Region 4 objections to Florida's PROPOSED Title V permit 0570040-002-AV for the F. J.Gannon Station. These objections were detailed in a letter from EPA Region 4 dated September 8, 2000.

The changes proposed in this letter result primarily from correspondence with the permittee and past resolution to similar objections the EPA found acceptable. Hopefully these changes will allow Florida to issue the FINAL Title V permit for this plant. Please review the following proposed changes to the referenced permits. If you concur with our changes, we will issue the FINAL Title V permit with these changes.

As you know, the 90 day period ends **December 6**. All parties involved have been expeditiously seeking resolution of these issues. We feel that EPA's concerns have been adequately addressed and we look forward to issuing a final permit. Please advise as soon as possible if you concur with the specific changes detailed below. Please contact Mr. Scott M. Sheplak, P.E., at 850/921-9532, if you need any additional information.

Sincerely,

Chief

Chief

Bureau of Air Regulation

Attachments

cc:

Karen A. Sheffield, P.E. Gregory Neslon, TEC, D.R. J. James Hunter, TEC Thomas Reese, Esq. Gail Kamaras, LEAF

Thomas Davis, P.E., ECT Bill Thomas, SWD Jerry Campbell, EPCHC Pat Comer, Esq., DEP

Enclosure

Tampa Electric Company's Comments on the U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit Tampa Electric Company

F.J. Gannon Station

Permit No. 0570040-002-AV

EPA Objection Issue 1

Federally Enforceable Requirements: Section II, conditions 6,7,11 and 12 are identified as "not federally enforceable." Conditions 6 and 7 are federally enforceable because they are contained in the federally approved portion of the Florida SIP. Conditions 11 and 12 address the requirement to provide compliance notifications and notification of potential permit modifications to the Environmental Protection Commission of Hillsborough County (EPCHC) and EPA, and provide the appropriate mailing addresses. Pursuant to 40 C.F.R. §70.6(c)(5)(iv), compliance certifications shall be submitted to the Administrator as well as to the permitting authority. Therefore, these conditions are also Federally enforceable since they are part of the required elements of a title V permit.

TEC Response

TEC is not opposed to making these conditions Federally enforceable.

Proposed Change:

The changes will be made.

EPA Objection Issue 2

Appropriate Averaging Times: The emission limits in conditions D.5, E.3, F.1, F.2, F.3, G.1, G.2, H.1, H.2, H.3, I.1, I.2, I.3, J.2, J.6, J.33.a, and K.2 do not contain averaging times. Appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. This deficiency may be addressed by including a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Based on review of the operating permits for F.J. Gannon Steam Generators No. 1 through No. 6, Region 4 recommends that condition J.2 specify an averaging time of two hours for particulate emissions from these units. Since the facility already uses this averaging time to evaluate compliance with the particulate matter limit for all but one of these units, the Department should include the same averaging time in the title V permit.

TEC Response

With regard to conditions D.5, E.3, F.2, F.3, G.2, G.3, H.2, H.3, I.2, I.3, J.2, J.6, and K.2, TEC suggests adding a clarifying note such as the following:

{Permitting Note: When not otherwise defined, averaging times for all specified emission standards shall be equal to the cumulative run time elapsed for all runs during the associated compliance test.}

Condition J.33.a(1) should be clarified by adding the words "on a hourly average basis" as follows:

- a. Quantity Limitation: The input rate per boiler shall not exceed:
 - (1) 50 gal/min on a hourly average basis.

Conditions F.1, G.1, H.1, and I.1 should be addressed as noted below in the response the Issue 4.

In response to EPA recommendation "that condition J.2 specify an averaging time of two hours for particulate emissions from these units", TEC disagrees and suggests that the above permitting note is the most appropriate method of resolving this issue.

Proposed Change:

The following permitting note will be added after conditions D.5, E.3, F.1, F.2, F.3, G.1, G.2, H.1, H.2, H.3, I.1, I.2, I.3, J.2, J.6, and K.2:

{Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

Condition J.33.a(1) will be clarified by adding the words "on a hourly average basis" as follows:

- b. <u>Quantity Limitation:</u> The input rate per boiler shall not exceed:
 - (1) 50 gal/min on a hourly average basis.

The requirement for a two-hour averaging time for particulate matter from the boilers has never been in a federally-enforceable permit. Its inclusion in an operating permit was based on Rule 17-2.600(5)(a)2., F.A.C. This rule no longer exists in our State Implementation Plan.

EPA Objection Issue 3

<u>Compliance Assurance – Excess Emissions:</u> Section III, conditions A.6, B.7, and C.5 allow TECO to bypass the ESP's and vent emissions from the slag tanks directly to the atmosphere, for the purposes off providing worker safety during maintenance, and to prevent equipment damage in the case of a loss of flow through the normal duct system to the ESP. While EPA Region 4 recognizes that such ventings may be necessary in limited circumstances, these conditions, as written, are overly

broad for the circumstances they are intended to cover and appear to automatically exempt all events from the slag tanks. An automatic exemption from enforcement, such as this, is known as a "No Action" Assurance. No action assurances are expressly prohibited by EPA (Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring, Policy Against "No Action" Assurances, November 16, 1984). The decision as to whether or not any particular excess emission event may or may not be allowed should be left up to the discretion of the FDEP and EPCHC, and should be evaluated on a case by case basis.

In addition, this excess emissions variance appears to conflict with the circumvention prohibition under 62-210.650, F.A.C., which states that "No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly." While Florida regulations allow FDEP to extend the duration of excess emissions under 62-210.700(5), F.A.C., there does not appear to be a similar variance allowed for the circumvention prohibition referenced above. In addition, slag tank venting to prevent equipment damage due to loss of flow through the normal duct system to the ESP appears to fall under existing malfunction provisions of the excess emissions requirements, so it is unclear why a specific variance is provided. Furthermore, item (b) of these conditions appears to limit the duration of these events to two-hours, as does the excess emissions rules, so the utility of a separate condition is also unclear.

Finally, one portion of this condition does not make sense as it is written. This portion of the condition states:

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of on slag tank volume per each emergency to correct the situation in a timely manner, not to exceed two hours.

It appears as through this is a run-on sentence. The first part of the sentence, that requires the reporting of excess emissions of greater than one slag tank volume, appears to have been combined with a sentence that requires excess emissions to be corrected in a timely manner, and that does not allow excess emissions to exceed two hours. This portion of the condition should be changed so that it is clearer to the reader.

TEC Response

TEC agrees that conditions A.6, B.7, and C.5 may be confusing as written and may overly addresses the issue of purging the slag tanks to ensure worker safety during maintenance or to prevent equipment damage due to loss of flow through the normal duct system. Since the frequency of events requiring purging of the slag tanks through the emergency vents is low and the volume of potential emissions minimal, this issue may be best addressed by adding the following to the "List of Insignificant Emissions Units and/or Activities" in Appendix I-1 of the permit.

The operation of slag tank purge vents to vent emissions to the atmosphere only for the purposes of worker safety during maintenance or to prevent equipment damage due to loss

of flow through the normal duct system to the electrostatic precipitator.

If the above resolution is not adopted, TEC requests that some alternative be reached to address this activity. If the existing language is kept, the language identified by the EPA as not making sense should be corrected by inserting the underlined language as noted below.

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of one slag tank volume per each emergencymaintenance job. TEC shall make a good faith effortto correct the situation in a timely manner, not to exceed two hours.

Proposed Change:

The "purging of slag tank vents" activity will be added to Appendix I-1.

EPA Objection Issue 4

Periodic Monitoring: As outlined below, the proposed title V permit for the F.J. Gannon Station does not contain adequate periodic monitoring requirements to assure compliance with all emissions and operational limits contained in the permit. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. 40 C.F.R. Part 70.6 (a)(3)(i)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to assuring compliance, a system of periodic monitoring should also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, periodic monitoring requirements sufficient to assure compliance with all permit limits must be incorporated in the permit or a technical demonstration must be included in the statement of basis explaining the rationale for the approach used by the Department to address periodic monitoring requirements for these units.

- a. Maximum Operating Rates: Conditions F.1, G.1, H.1, and I.1 specify the maximum operating rates for fly ash and fuel handling equipment identified as, EU-009, EUs -010 and -012, EU-011, and EUs -13 through -018, respectively. However, the permit does not provide for periodic monitoring sufficient to assure compliance with these operating rate limitations. For other units included in this permit, there is a permitting note clarifying that these conditions are not included as limits, but as a basis for determining the percent capacity of the units during source testing (see A.1, and B.1). Please add periodic monitoring provisions to the permit to address conditions F.1, G.1, H.1, and I.1, or add clarifying language to discuss why these conditions are not included as limits.
- b. <u>Normal Operating Temperature</u>: Conditions J.33.b and J.34.d only allow boiler cleaning waste and used oil, respectively, to be fed to boilers 1 through 6 if these units are operating at "normal source operating temperatures."

TEC Response

In response to 4.a above, TEC suggests that a clarifying note, similar to the following, be included in each of the identified conditions.

{Permitting note: The material loading limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. Regular record keeping is not required for material loading. Instead the owner or operator is expected to determine material loading whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emission tests. Material loading determinations may be based on best engineering evaluation of the operating requirements necessary to achieve 90 to 100 percent of the rated loading, unless such operating conditions are otherwise specified by permit condition.}

In response to 4.b above, TEC suggests that the language in the identified conditions is appropriate and complete. Additional periodic monitoring of "normal source operating temperatures" is inconsistent with other permits that contain this identical language. Therefore, TEC requests that conditions J.33.b and J.34.d, as well as any related conditions, remain as they appear.

Proposed Change:

Changes will be made per TEC's suggestions.

EPA Objection Issue 5

Applicable Requirements – Consent Decree: The Gannon permit requires TECO to comply with the Consent Decree (CD) entered into between the United States and TECO on February 29, 2000; however, the specific terms and conditions of the Consent Decree have not been incorporated into the permit. Part 70.6(a)(1) requires a title V permit to include those operational requirements and limitations that assure compliance with all applicable requirements at the time of the permit issuance. Where necessary, 70.5(c)(8) requires a permit to include a schedule of compliance that is at least as stringent as that contained in any judicial consent decree, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. Therefore, the text of this permit should be reworked to incorporate the terms and conditions of the Consent Decree. Further, because the permit and the Consent Decree contain so many related provisions, facility personnel would benefit from having all the relevant requirements included in one document. For example, EPA Region 4 recommends that at least the following changes/additions be incorporated into the permit:

a. The consent decree requires that at least 200 MW of coal-fired generating capacity at the Gannon Station be repowered by 5/01/03, and that at least the difference between 550 MW of coal-fired generating capacity and the amount of coal-fired generating capacity that was repowered prior to 5/01/03, be repowered by 12/31/04. In addition, all coal-fired boilers (six units totaling 1194 MW) at the Gannon Station are to be shut down by 12/31/04, and no combustion of coal is allowed at the plant after 1/01/05. These shut down units are allowed to be kept in reserve/standby if not repowered. However, if the reserve/standby units are ever to be restarted, then a PSD permit is required prior to the restart.

The consent decree has left TECO the latitude to determine which units to repower, which units to leave in reserve/standby, the exact schedule of repowering and shutdown, etc.. Therefore, the permit does not need to specify which units are to be repowered/shutdown, or specify anything concerning the new emission units that will be constructed as a result of the repowering projects (emission limits, controls, etc.), until TECO applies to amend the permit when required to do so. However, the general requirements (minimum MWs to be repowered, shutdown of remaining units, no further combustion of coal, etc.) should be included in the permit, because these are requirements of a federally enforceable consent decree that will not change, and will take effect within the five year time period prior to permit expiration.

- b. Change the renewal application due date to January 1, 2004 and the expiration date to December 31, 2004. Paragraph 42 of the CD requires TECO to submit a permit application or request an amendment to the existing permit no later than January 1, 2004. Paragraph 28 of the CD requires TECO to stop burning coal at any unit at Gannon no later than January 1, 2005.
- c. Change paragraphs A.2, B.2 and C.2 to reflect TECO's commitment to stop burning coal no later than January 1, 2005 by including a statement that it will be switching fuels to only use natural gas no later than January 1, 2005.
- d. The permit should clearly reflect TECO's commitment, as outlined in Paragraph 46 of the CD, to either use its emission allowances internally or give them up. It does not appear to do so at all.

TEC Response

TEC is not opposed to incorporation of a condition identifying the Consent Decree requirement referenced in 5.a above, as long as the language is consistent with that found in the Consent Decree.

TEC does not agree with the suggested date changes identified in 5.b above. Since the Consent Decree allows TEC to submit a permit application <u>or</u> amend the existing permit by January 1, 2004, there is no need to change the "renewal application" or "expiration" dates found in the permit.

TEC is not opposed to the suggestion in 5.c above to modify conditions A.2, B.2 and C.2 to reflect the commitment to stop burning coal at these units; however, TEC is opposed to any statement that goes beyond the commitment to stop using coal, such as that suggested by EPA that TEC will "only use natural gas".

With regard to the emission allowance comment in 5.d above, TEC is not opposed to including a permit condition to incorporate the appropriate requirements of the Consent Decree, as long as the language is consistent with that found in the Consent Decree.

Proposed Change:

Changes will be made per TEC's suggestions.

EPA Objection Issue 6

<u>Acid Rain Requirements:</u> The following items from Section IV, Phase II Acid Rain Part, must be corrected in order to make the requirements consistent with the Acid Rain regulations applicable to this facility:

- a. Phase II of the Acid Rain Program began on January 1, 2000, which is the date by which initial Phase II permits for existing phase II units are to be effective (40 C.F.R. 72.73(b)(2). "State Issuance of Phase II Permits"). However, the effective date proposed for the title V permit containing the Phase II Acid Rain Part for the F.J. Gannon Station is January 1, 2001. The permit needs to clarify that the effective period for the Phase II Acid Rain Part is five years beginning January 1, 2000.
- b. Section IV. "Phase II Acid Rain Part", lists the Acid Rain, Phase II SO₂ allowance allocations for the F.J. Gannon units GN03, GN04, GN05 and GN06 for the years 2001 through 2005. The SO₂ requirements under the Acid Rain Program are effective beginning January 1, 2000, therefore, the permit needs to be revised to include the allowance allocation s for these units for the year 2000.
- c. Section IV. "Phase II Acid Rain Part", contains the Phase II NO_x limitations for the years 2001 through 2004 for the F.J. Gannon units GN03, GN04, GN05 and GN06. The Phase II NO_x Averaging Plan submitted by the source (signed December 20, 1999) indicates that the plan is to be effective for the years 2000 through 2004. The permit needs to be revised to include NO_x limits for the year 2000. In addition, since the proposed expiration date of the Title V. permit is December 31, 2005, the permit will need to be revised to include Phase II NO_x emission limits for the year 2005. The permits will also need to contain a Phase II NO_x Compliance Plan submitted by the source indicating how the source plans to comply with the Phase II NO_x emission limits for the year 2005.
- d. The heat input value specified under the NO_x limits for the units GN03, GN04 do not match those specified in the Phase II NOx Averaging Plan submitted by TECO. Please revise the Phase II Acid Rain Part of the permit to be consistent with the Averaging Plan.

TEC Response

TEC agrees that Phase II of the Acid Rain Program began on January 1, 2000. In addition, it is TEC's position that regardless of the effective date of the Acid Rain Part of the Title V permit, that TEC is in compliance with, and operating under the terms of, the Acid Rain Program regulations and the Acid Rain Permit application and associated compliance plans.

TEC agrees that if the Acid Rain Part has an effective date of January 1, 2000 that the SO₂ allowance allocations for the year 2000 need to be included. In addition to the four units identified in 6.b above, Units GN01 and GN02 also need to have SO₂ allowance allocations specified for the year 2000.

TEC agrees that the NO_x Averaging Plan referred to in 6.c above is effective for the years 2000 through 2004 and that if the Acid Rain Part has an effective date of January 1, 2000 that it should include the NO_x limits for the year 2000. TEC also notes that if the Acid Rain Part is extended from 2000 through 2005 that it will cover six years, which is in apparent conflict with the requirement that Acid Rain Permit are effective for five years.

TEC agrees with the comment in 6.d above. The heat input value for GN03 should be changed from "8,550,000" to "8,500,000" and the value for GN04 should be changed from "7,550,000" to "7,500,000".

Proposed Change:

The expiration date of the Title V permit will be changed from December 31, 2005 to December 31, 2004 so that the Title V permit will be in sync with the NOx averaging plan submitted by Tampa Electric. The SO₂ allowance table will be changed to show the allowances for years 2000 to 2004 instead of years 2001 to 2005. The NOx language will be changed to the following:

"Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NOx emissions averaging plan submitted on 12/22/99 for this unit. Under the plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.74 lb/mmBtu. In addition, this unit shall not have an annual heat input less than 23.000.000 mmBtu." (Information that is underlined will vary depending on the particular unit.)

The heat input value for GN03 will be changed from "8,550,000" to "8,500,000" and the value for GN04 will be changed from "7,550,000" to "7,500,000".

General Comments

TEC understands that items addressed in this "General Comments" section are informational in nature only and are not issues that will result in an objection if left unresolved. As such, comments are provided only where appropriate.

General Comment 1

<u>General Comment</u> – Please note that EPA reserves the right to enforce any noncompliance, including any noncompliance related to issues that have not been specifically raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.

TEC Response

No comment.

Proposed Change:

The department acknowledges the comment.

General Comment 2

<u>Placard Page – Acid Rain:</u> The "Referenced attachments made part of this permit," should include the Phase II Acid Rain Part application referred to in Section IV of the permit (Phase II SO2 Acid Rain Application/Compliance Plan received December 26, 1995).

TEC Response

No comment.

Proposed Change:

The change will be made.

General Comment 3

Section II, Condition 10: 40 C.F.R. Part 70.6 (c)(5)(iii) lists the necessary components of a Title V compliance certification, and requires that those components be included in the Title V permits. While Facility-Wide Condition # 10 of the permit does require that the source submit an annual compliance certification, the condition does not specify that the permit should specifically state that the source is required to submit compliance certifications consisting of the required components.

Further, those required components should be listed in the permit.

In this case the list from 40 C.F.R. Part 70.6 (c)(5)(iii) is contained at Appendix TV-3. While it is sufficient to include the list in an Appendix to the permit, the required compliance certification components should at least be mentioned in the permit at the condition requiring the source to submit a Title V compliance certification to EPA. This will allow the requirement to be clear and enforceable. Therefore, Facility-Wide Condition # 10 of the permit should mention the required components listed at 40 C.F.R. Part 70.6 (c)(5)(iii), and reference the list contained at Appendix TV-3.

TEC Response

No Comment.

Proposed Change:

No change will be made.

General Comment 4

Section III. Condition A.2.b, B.2.b, and C.2.b: These conditions cover the methods of operation for Steam Generators No. 1 through No. 6, and state that new No. 2 fuel oil may be burned during startup, shutdown and malfunctions, and "includes, but is not limited to the emission unit, a new cyclone/mill or flame stabilization." Please explain what the "new cyclone/mill" is and how it is associated with the facility.

TEC Response

The term "new cyclone/mill" in this condition refers to the placement into service, or removal from service, of an additional existing fuel mill feeding the boiler or an individual cyclone in the case of the cyclone boilers. The addition or removal of these pieces of equipment is necessary as the load of the unit moves up and down. The reference to "new" is not intended to refer to equipment that is not currently a part of these units.

Proposed Change:

See TEC's response. No change to the permit.

General Comment 5

Section III. Condition A.5.c.i.: This condition references the maximum percentage of wood derived fuel (W.F.) allowed to be ciphered with coal in Unit No. 3, which is "based on the W.F. blend ration (6.3%) + 10% = 7%." It is unclear how the 7 percent value was established given this calculation.

Please clarify how the temporary 7 percent limit was calculated and revise this condition as appropriate.

TEC Response

The intent of this condition was to allow a blend ratio of 110% of the tested rate of 6.3%. This could be clarified as follows:

$$(6.3\%) + 10\%(6.3\%) = 7\%$$
 or $110\%(6.3\%) = 7\%$

Proposed Change:

The change will be made per TEC's suggestion.

General Comment 6

Section III. Condition E.1 Subsection E contains the permit conditions that are applicable to the fuel yard. Condition E.1 limits the twelve month throughput of coal and auxiliary fuel, consisting of TDF and W.F. (W.F. has been defined in the permit as "Wood Derived Fuel", and EPA Region 4 assumes that TDF stands for "Tire Derived Fuel"). While subsections of the permit pertaining to particular emission units did contain conditions that allow the combustion of W.F., none of the conditions for these emission units mentioned anything about allowing for the combustion of TDF. If TDF is to be combusted in any of the emission units at this facility, then the permit conditions that specify the authorized fuels must state that TDF is allowed to be burned. Further, any applicable limits related to the combustion of TDF must also be included in the permit.

TEC Response

The term "TDF" in this condition does refer to "Tire Derived Fuel". TEC is aware that TDF is not currently allowed to be burn at the facility and that additional permitting will be necessary to allow for the burning of this auxiliary fuel.

Proposed Change:

The acronym TDF (Tire Derived Fuel) will be spelled out in the condition.

General Comment 7

<u>Section III. Condition E.7:</u> This condition refers to the limitations in condition E.3. Please verify whether this condition should reference condition E.4 instead.

TEC Response

TEC agrees that the reference should be changed from "E.3" to "E.4".

Proposed Change:

The change will be made.

General Comment 8

<u>Section III.</u> Condition E.10: This condition refers to the emissions discussed in condition E.6. Please verify whether this condition should reference condition E.3 instead.

TEC Response

TEC agrees that the reference should be changed from "E.6" to "E.3".

Proposed Change:

The change will be made.

General Comment 9

Periodic Monitoring: As you are aware, on April 14, 2000, the U.S. Court of Appeals for the D.C. Circuit issued an opinion addressing industry's challenge to the validity of portions of EPA's periodic monitoring guidance. See, Appalachian Power Co. v. EPA, No. 98-1512 (C.C. Cir., April 14, 2000). The Court found that "State permitting authorities [] may not, on the basis of EPA's guidance or 40 C.F.R. 70.6(a)(3)(i)(B), require in permits that the regulated source conducts more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test." While the permit contains testing from "time to time", as discussed in the court opinion, EPA does not consider these conditions sufficient to ensure compliance. In light of the court case, EPA is withholding formal objection regarding the adequacy of the periodic monitoring included in the permit for the following pollutants: Visible Emissions (VE) and Particulate Matter (PM). EPA's concerns are outlined below:

a. Visible Emissions: The permit does not contain adequate periodic monitoring for visible emissions to demonstrate compliance with the limits specified in the conditions D.5, E.3, F.2, G.2, H.2, I.3, or K.2. Although the source is required to perform an annual method 9 test for each emission unit, a test only once per year will not be sufficient to assure that the visible emission standard for each emission unit has been complied with on a continuous basis. This is especially true for several of the emission units that are subject to a relatively stringent visible emissions standard (i.e. no more than 5 % opacity is allowed). It was noted, however, that Operation and Maintenance (O&M) Plans for Particulate Matter have been established for many of these units (see conditions E.9, F.5, G.5, and H.5) and that non-title V operating permits contain O&M plans for the units covered under subsections D and I. One option to resolve this comment would be to include language in the permit which creates an enforceable link between the O&M activities and the associated VE limits in the above-reference permit conditions, such that the visual inspections/observations required in the O&M plans would qualify as

periodic monitoring. Another option would be to include new conditions in the permit to require the source to perform and record the results of a qualitative observation of opacity over a specified frequency for each emission unit that is subject to a visible emission standard. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted within 24 hours of the qualitative survey. As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the VE emission limitations for these units. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year

b. Particulate Matter: The permit does not contain adequate periodic monitoring for particulate matter emissions to demonstrate compliance with the limits specified in conditions F.3, G.3, H.3, I.2, or J.2. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided.

While the permit does include parametric monitoring of emission unit and control equipment operations in the O&M plans for these units (see conditions A.4, B.5, C.4, F.5, G.5, and H.5), the parametric monitoring scheme that has been specified is not adequate. The parameters to be monitored and the frequency of the monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of the normal operating time. The Department should set the appropriate percentage of the operating time that would serve as trigger for this testing requirement.

As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the PM emission limitations for these units. The demonstration needs to identify the rational for basing the compliance certification on data from a short-term test performed once a year.

c. Particulate Matter: Condition I.2 contains particulate matter limits of 0.99 tons per year and 0.19 pounds per hour for each of the six fuel bunkers and rotoclones. This condition exempts these units from the provisions of the particulate matter RACT, which is allowed under 62-296.700(2), by limiting emissions from each unit to less than one ton per year. However, the permit does not provide a means to ensure that particulate matter emissions actually remain below this threshold. Condition I.5 states that these units are also subject to the Common Conditions outlined in Subsection K, and condition K.2, allows for compliance with a five percent visible emissions limit in lieu of particulate matter stack testing for units equipped with a baghouse. Since the fuel bunkers covered under Subsection I are not equipped with baghouses, the allowance in condition K.2 does not appear to apply for these units. There is also a visible emissions limit of 20 percent in condition I.3. To resolve this issue, please provide discussion in the statement of basis which gives assurance that emissions from these units qualify for the exemption, and demonstrate that sufficient monitoring is provided in the permit to assure compliance with the particulate matter limit.

TEC Response

TEC feels that adequate periodic monitoring has been incorporated into the permit conditions and that additional monitoring requirements are not warranted.

Proposed Change:

No change will be made.

DEP MEDIA HOT SHEET

إما دائ

TOPIC: The USEPA's Objections to Tampa Electric Company's Big Bend and Gannon Title V Permits

DATE:

October 10, 2000, approximately 5:00 P.M.

REPORTER'S NAME:

Cheri Jacobs

FROM:

Tampa Tribune, (813)259-7668

PERSON INTERVIEWED: Scott M. Sheplak, Administrator, Title V Section

Division of Air Resources Management

Bureau of Air Regulation

QUESTIONS ASKED:

1. What is Title V?

2. Why is a Title V permit needed?

3. How is the USEPA involved?

4. Is it typical for the USEPA to object to permits?

- 5. How many objections has the Environmental Protection Agency filed?
- 6. In your opinion are the objections significant?
- 7. Please go through the specific objection issues.

SUMMARY OF CONVERSATION:

- 1. Title V is one of the provisions of the 1990 Clean Air Act Amendments. Owners of Title V sources are required to apply for Title V permits. Title V permits allow continued operation of a source. Title V permits are operation permits.
- 2. Title V permits are required under the Act. Applications were received from the existing sources in mid-1996. I informed her that it took approximately six years for the program development (i.e., federal and state rulemaking, application submittals). Florida is almost finished with all initial Title V permits, while the national average is 35%. The TECO permits are the last utility permits to be issued. Title V is a new program under the 1990 CAA. Florida has had an operating permit program for almost twenty years.
- 3. There are three distinct stages of a Title V permit: DRAFT, PROPOSED, and FINAL. The DRAFT permit is public noticed. After comments are addressed the permit is forwarded to the USEPA as a PROPOSED permit. The USEPA has forty-five (45) days to review the permit and object if they choose to do so.

- 4. and 5. The USEPA has objected to thirty-eight (38) permits in Florida; roughly ten per-cent (10%) of our permits. Florida has issued four-hundred-seventeen (417) DRAFT permits. The Department has been able to resolve all of EPA's concerns on prior objections. The USEPA has objected to permits for two reasons primarily: 1) national issues or 2) specific issue with a plant. We have a deadline to resolve the permits or the USEPA can assume authority and issue the permits. The deadline to resolve the permits (Day 90) is December 4 for Big Bend and December 6 for Gannon. TECO has forty-five (45) days to file their own comments on the USEPA's objections. {To date no comments have been received from TECO with day forty-five (45) being November 4.}
- 6. No, the objections appear to be resolvable.
- 7. I explained to her that we plan to do a detailed analysis of the comments by the end of October. She plans to call us back to find out our analysis. The USEPA categorized comments as either "Objection Issues" or "General Comments". Objection issues are "showstoppers". Comments on both plants are similar.

BIG BEND BRIEF OVERVIEW OF OBJECTION ISSUES

Issues 1., 2., 4., and 6. in my opinion are minor. Issue item 3., Excess Emissions and issue item 5., Consent Decree require further research. I informed her that we included both the federal and state settlements in each permit.

She may call back for editorial comments. She is not sure if she will be doing a story on any of this.

Barbara \ File



Department of Environmental Protection

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

David B. Struhs Secretary

October 20, 2000

Mr. Jamie Hunter Consulting Engineer, Environmental Affairs Tampa Electric Company P.O. Box 111 Tampa, Florida 33601-0111

Re: Recognition of Latex Binder as a Dust Suppressant

Dear Mr. Hunter:

We have received your request to begin using a latex binder on your coal as a means of suppressing fugitive dust (Latex DL 298NA, made by DOW Chemical Company). We have also received a certification from your Professional Engineer detailing the lack of detrimental environmental effects resulting from the use of this product.

It is our opinion that this particular material falls within the classification of "chemical dust suppressant" that is authorized by your Title V permit (see Appendix TV-3, condition 57.). For inspection purposes, please retain on-site a copy of the material safety data sheet (MSDS), a copy of your contract with the coal supplier specifying the material that will be applied to your coal, and a certification from the supplier accompanying each delivery that attests that this is the only material that has been applied to your coal. If TECO or the supplier desires to use a different material, you must inform the Department and receive concurrence prior to combusting the new product.

Under the provisions of Rule 62-297.310(7)(b), F.A.C., if, at any time, the Department has reason to believe that any of your emission limits are not being met (i.e. increased particulate matter, etc.), it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely,

Chief

Bureau of Air Regulation

CHF/jh

cc: Mr. Thomas W. Davis, P.E., ECT

Mr. Buck Oven, P.E., DEP

Mr. Jerry Kissel, P.E., DEP-SWD

Mr. Jerry Campbell, P.E., EPCHC

"More Protection, Less Process"

Printed on recycled paper.



RECEIVED

NOV 08 2000

BUREAU OF AIR REGULATION

November 3, 2000

Mr. Scott M. Sheplak, P.E. Florida Department of Environmental Protection 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Via FedEx Airbill No. 7918 8963 1186

Re:

Tampa Electric Company F. J. Gannon Station

Comments on EPA Objections to the

Proposed Title V Permit FDEP File No. 0570040-002-AV

Dear Mr. Sheplak:

Please find enclosed Tampa Electric Company's (TEC) comments on the EPA's objections to the proposed Title V permit for F.J. Gannon Station. In the enclosure, the EPA's objections from the letter to Howard Rhodes date stamped September 8, 2000 have been restated for convenience along with the TEC response.

Please feel free to telephone Jamie Hunter at (813) 641-5033, if you have any questions.

Sincerely,

Karen A. Sheffield, P.E.

General Manager / Responsible Official

Karen a Sheffield

F.J. Gannon Station

EP\gm\JJH938

Enclosure

c/enc: Mr. Clair Fancy, FDEP-Tallahassee

Mr. Bruce Mitchell, FDEP-Tallahassee Mr. Jerry Kissel, FDEP-SW District

11/8/00 cc 2 andy Phillips

Mr. Jerry Campbell, EPCHC

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

Enclosure

Tampa Electric Company's Comments on the U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit Tampa Electric Company F.J. Gannon Station Permit No. 0570040-002-AV

EPA Objection Issue 1

<u>Federally Enforceable Requirements</u>: Section II, conditions 6,7,11 and 12 are identified as "not federally enforceable." Conditions 6 and 7 are federally enforceable because they are contained in the federally approved portion of the Florida SIP. Conditions 11 and 12 address the requirement to provide compliance notifications and notification of potential permit modifications to the Environmental Protection Commission of Hillsborough County (EPCHC) and EPA, and provide the appropriate mailing addresses. Pursuant to 40 C.F.R. §70.6(c)(5)(iv), compliance certifications shall be submitted to the Administrator as well as to the permitting authority. Therefore, these conditions are also Federally enforceable since they are part of the required elements of a title V permit.

TEC Response

TEC is not opposed to making these conditions Federally enforceable.

EPA Objection Issue 2

Appropriate Averaging Times: The emission limits in conditions D.5, E.3, F.1, F.2, F.3, G.1, G.2, H.1, H.2, H.3, I.1, I.2, I.3, J.2, J.6, J.33.a, and K.2 do not contain averaging times. Appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. This deficiency may be addressed by including a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Based on review of the operating permits for F.J. Gannon Steam Generators No. 1 through No. 6, Region 4 recommends that condition J.2 specify an averaging time of two hours for particulate emissions from these units. Since the facility already uses this averaging time to evaluate compliance with the particulate matter limit for all but one of these units, the Department should include the same averaging time in the title V permit.

TEC Response

With regard to conditions D.5, E.3, F.2, F.3, G.2, G.3, H.2, H.3, I.2, I.3, J.2, J.6, and K.2, TEC suggests adding a clarifying note such as the following:

{Permitting Note: When not otherwise defined, averaging times for all specified emission standards shall be equal to the cumulative run time elapsed for all runs during the associated compliance test.}

Condition J.33.a(1) should be clarified by adding the words "on a hourly average basis" as follows:

a. Quantity Limitation: The input rate per boiler shall not exceed:
 (1) 50 gal/min on a hourly average basis.

Conditions F.1, G.1, H.1, and I.1 should be addressed as noted below in the response the Issue 4.

In response to EPA recommendation "that condition J.2 specify an averaging time of two hours for particulate emissions from these units", TEC disagrees and suggests that the above permitting note is the most appropriate method of resolving this issue.

EPA Objection Issue 3

Compliance Assurance – Excess Emissions: Section III, conditions A.6, B.7, and C.5 allow TECO to bypass the ESP's and vent emissions from the slag tanks directly to the atmosphere, for the purposes off providing worker safety during maintenance, and to prevent equipment damage in the case of a loss of flow through the normal duct system to the ESP. While EPA Region 4 recognizes that such ventings may be necessary in limited circumstances, these conditions, as written, are overly broad for the circumstances they are intended to cover and appear to automatically exempt all events from the slag tanks. An automatic exemption from enforcement, such as this, is known as a "No Action" Assurance. No action assurances are expressly prohibited by EPA (Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring, Policy Against "No Action" Assurances, November 16, 1984). The decision as to whether or not any particular excess emission event may or may not be allowed should be left up to the discretion of the FDEP and EPCHC, and should be evaluated on a case by case basis.

In addition, this excess emissions variance appears to conflict with the circumvention prohibition under 62-210.650, F.A.C., which states that "No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly." While Florida regulations allow FDEP to extend the duration of excess emissions under 62-210.700(5), F.A.C., there does not appear to be a similar variance allowed for the circumvention prohibition referenced above. In addition, slag tank venting to prevent equipment damage due to loss of flow through the normal duct system to the ESP appears to fall under existing malfunction provisions of the excess emissions requirements, so it is unclear why a specific variance is provided. Furthermore, item (b) of these conditions appears to limit the duration of these events to two-hours, as does the excess emissions rules, so the utility of a separate condition is also unclear.

Finally, one portion of this condition does not make sense as it is written. This portion of the condition states:

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of on slag tank volume per each emergency to correct the situation in a timely manner, not to exceed two hours.

It appears as through this is a run-on sentence. The first part of the sentence, that requires the reporting of excess emissions of greater than one slag tank volume, appears to have been combined with a sentence that requires excess emissions to be corrected in a timely manner, and that does not allow excess emissions to exceed two hours. This portion of the condition should be changed so that it is clearer to the reader.

TEC Response

TEC agrees that conditions A.6, B.7, and C.5 may be confusing as written and may overly addresses the issue of purging the slag tanks to ensure worker safety during maintenance or to prevent equipment damage due to loss of flow through the normal duct system. Since the frequency of events requiring purging of the slag tanks through the emergency vents is low and the volume of potential emissions minimal, this issue may be best addressed by adding the following to the "List of Insignificant Emissions Units and/or Activities" in Appendix I-1 of the permit.

The operation of slag tank purge vents to vent emissions to the atmosphere only for the purposes of worker safety during maintenance or to prevent equipment damage due to loss of flow through the normal duct system to the electrostatic precipitator.

If the above resolution is not adopted, TEC requests that some alternative be reached to address this activity. If the existing language is kept, the language identified by the EPA as not making sense should be corrected by inserting the underlined language as noted below.

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of one slag tank volume per each emergency maintenance job. TEC shall make a good faith effort to correct the situation in a timely manner, not to exceed two hours.

EPA Objection Issue 4

Periodic Monitoring: As outlined below, the proposed title V permit for the F.J. Gannon Station does not contain adequate periodic monitoring requirements to assure compliance with all emissions and operational limits contained in the permit. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. 40 C.F.R. Part 70.6 (a)(3)(i)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to assuring compliance, a system of periodic monitoring should also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, periodic monitoring requirements sufficient to assure compliance with all permit limits must be incorporated in the permit or a technical demonstration must be included in the statement of basis explaining the rationale for the approach used by the Department to address periodic monitoring requirements for these units.

- a. Maximum Operating Rates: Conditions F.1, G.1, H.1, and I.1 specify the maximum operating rates for fly ash and fuel handling equipment identified as, EU-009, EUs -010 and -012, EU-011, and EUs -13 through -018, respectively. However, the permit does not provide for periodic monitoring sufficient to assure compliance with these operating rate limitations. For other units included in this permit, there is a permitting note clarifying that these conditions are not included as limits, but as a basis for determining the percent capacity of the units during source testing (see A.1, and B.1). Please add periodic monitoring provisions to the permit to address conditions F.1, G.1, H.1, and I.1, or add clarifying language to discuss why these conditions are not included as limits.
- b. Normal Operating Temperature: Conditions J.33.b and J.34.d only allow boiler cleaning waste and used oil, respectively, to be fed to boilers 1 through 6 if these units are operating at "normal source operating temperatures."

TEC Response

In response to 4.a above, TEC suggests that a clarifying note, similar to the following, be included in each of the identified conditions.

{Permitting note: The material loading limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. Regular record keeping is not required for material loading. Instead the owner or operator is expected to determine material loading whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emission tests. Material loading determinations may be based on best engineering evaluation of the operating requirements necessary to achieve 90 to 100 percent of the rated loading, unless such operating conditions are otherwise specified by permit condition.}

In response to 4.b above, TEC suggests that the language in the identified conditions is appropriate and complete. Additional periodic monitoring of "normal source operating temperatures" is inconsistent with other permits that contain this identical language. Therefore, TEC requests that conditions J.33.b and J.34.d, as well as any related conditions, remain as they appear.

EPA Objection Issue 5

Applicable Requirements – Consent Decree: The Gannon permit requires TECO to comply with the Consent Decree (CD) entered into between the United States and TECO on February 29, 2000; however, the specific terms and conditions of the Consent Decree have not been incorporated into the permit. Part 70.6(a)(1) requires a title V permit to include those operational requirements and limitations that assure compliance with all applicable requirements at the time of the permit issuance. Where necessary, 70.5(c)(8) requires a permit to include a schedule of compliance that is at least as stringent as that contained in any judicial consent decree, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. Therefore, the text of this permit should be reworked to incorporate the terms and conditions of the Consent Decree. Further, because the permit and the Consent Decree contain so many related provisions, facility personnel would benefit from having all the relevant requirements included in one document. For example, EPA Region 4 recommends that at least the following changes/additions be incorporated into the permit:

a. The consent decree requires that at least 200 MW of coal-fired generating capacity at the Gannon Station be repowered by 5/01/03, and that at least the difference between 550 MW of coal-fired generating capacity and the amount of coal-fired generating capacity that was repowered prior to 5/01/03, be repowered by 12/31/04. In addition, all coal-fired boilers (six units totaling 1194 MW) at the Gannon Station are to be shut down by 12/31/04, and no combustion of coal is allowed at the plant after 1/01/05. These shut down units are allowed to be kept in reserve/standby if not repowered. However, if the reserve/standby units are ever to be restarted, then a PSD permit is required prior to the restart.

The consent decree has left TECO the latitude to determine which units to repower, which units to leave in reserve/standby, the exact schedule of repowering and shutdown, etc.. Therefore, the permit does not need to specify which units are to be repowered/shutdown, or specify anything concerning the new emission units that will be constructed as a result of the repowering projects (emission limits, controls, etc.), until TECO applies to amend the permit when required to do so. However, the general requirements (minimum MWs to be repowered, shutdown of remaining units, no further combustion of coal, etc.) should be included in the permit, because these are requirements of a federally enforceable consent decree that will not change, and will take effect within the five year time period prior to permit expiration.

- b. Change the renewal application due date to January 1, 2004 and the expiration date to December 31, 2004. Paragraph 42 of the CD requires TECO to submit a permit application or request an amendment to the existing permit no later than January 1, 2004. Paragraph 28 of the CD requires TECO to stop burning coal at any unit at Gannon no later than January 1, 2005.
- c. Change paragraphs A.2, B.2 and C.2 to reflect TECO's commitment to stop burning coal no later than January 1, 2005 by including a statement that it will be switching fuels to only use natural gas no later than January 1, 2005.
- d. The permit should clearly reflect TECO's commitment, as outlined in Paragraph 46 of the CD, to either use its emission allowances internally or give them up. It does not appear to do so at all.

TEC Response

TEC is not opposed to incorporation of a condition identifying the Consent Decree requirement referenced in 5.a above, as long as the language is consistent with that found in the Consent Decree.

TEC does not agree with the suggested date changes identified in 5.b above. Since the Consent Decree allows TEC to submit a permit application <u>or</u> amend the existing permit by January 1, 2004, there is no need to change the "renewal application" or "expiration" dates found in the permit.

TEC is not opposed to the suggestion in 5.c above to modify conditions A.2, B.2 and C.2 to reflect the commitment to stop burning coal at these units; however, TEC is opposed to any statement that goes beyond the commitment to stop using coal, such as that suggested by EPA that TEC will "only use natural gas".

With regard to the emission allowance comment in 5.d above, TEC is not opposed to including a permit condition to incorporate the appropriate requirements of the Consent Decree, as long as the language is consistent with that found in the Consent Decree.

EPA Objection Issue 6

Acid Rain Requirements: The following items from Section IV, Phase II Acid Rain Part, must be corrected in order to make the requirements consistent with the Acid Rain regulations applicable to this facility:

- a. Phase II of the Acid Rain Program began on January 1, 2000, which is the date by which initial Phase II permits for existing phase II units are to be effective (40 C.F.R. 72.73(b)(2), "State Issuance of Phase II Permits"). However, the effective date proposed for the title V permit containing the Phase II Acid Rain Part for the F.J. Gannon Station is January 1, 2001. The permit needs to clarify that the effective period for the Phase II Acid Rain Part is five years beginning January 1, 2000.
- b. Section IV. "Phase II Acid Rain Part", lists the Acid Rain, Phase II SO₂ allowance allocations for the F.J. Gannon units GN03, GN04, GN05 and GN06 for the years 2001 through 2005. The SO₂ requirements under the Acid Rain Program are effective beginning January 1, 2000, therefore, the permit needs to be revised to include the allowance allocation s for these units for the year 2000.
- c. Section IV. "Phase II Acid Rain Part", contains the Phase II NO_x limitations for the years 2001 through 2004 for the F.J. Gannon units GN03, GN04, GN05 and GN06. The Phase II NO_x Averaging Plan submitted by the source (signed December 20, 1999) indicates that the plan is to be effective for the years 2000 through 2004. The permit needs to be revised to include NO_x limits for the year 2000. In addition, since the proposed expiration date of the Title V permit is December 31, 2005, the permit will need to be revised to include Phase II NO_x emission limits for the year 2005. The permits will also need to contain a Phase II NO_x Compliance Plan submitted by the source indicating how the source plans to comply with the Phase II NO_x emission limits for the year 2005.
- d. The heat input value specified under the NO_x limits for the units GN03, GN04 do not match those specified in the Phase II NOx Averaging Plan submitted by TECO. Please revise the Phase II Acid Rain Part of the permit to be consistent with the Averaging Plan.

TEC Response

TEC agrees that Phase II of the Acid Rain Program began on January 1, 2000. In addition, it is TEC's position that regardless of the effective date of the Acid Rain Part of the Title V permit, that TEC is in compliance with, and operating under the terms of, the Acid Rain Program regulations and the Acid Rain Permit application and associated compliance plans.

TEC agrees that if the Acid Rain Part has an effective date of January 1, 2000 that the SO_2 allowance allocations for the year 2000 need to be included. In addition to the four units identified in 6.b above, Units GN01 and GN02 also need to have SO_2 allowance allocations specified for the year 2000.

TEC agrees that the NO_x Averaging Plan referred to in 6.c above is effective for the years 2000 through 2004 and that if the Acid Rain Part has an effective date of January 1, 2000 that it should include the NO_x

limits for the year 2000. TEC also notes that if the Acid Rain Part is extended from 2000 through 2005 that it will cover six years, which is in apparent conflict with the requirement that Acid Rain Permit are effective for five years.

TEC agrees with the comment in 6.d above. The heat input value for GN03 should be changed from "8,550,000" to "8,500,000" and the value for GN04 should be changed from "7,550,000" to "7,500,000".

General Comments

TEC understands that items addressed in this "General Comments" section are informational in nature only and are not issues that will result in an objection if left unresolved. As such, comments are provided only where appropriate.

General Comment 1

<u>General Comment</u> – Please note that EPA reserves the right to enforce any noncompliance, including any noncompliance related to issues that have not been specifically raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.

TEC Response

No comment.

General Comment 2

<u>Placard Page – Acid Rain:</u> The "Referenced attachments made part of this permit," should include the Phase II Acid Rain Part application referred to in Section IV of the permit (Phase II SO2 Acid Rain Application/Compliance Plan received December 26, 1995).

TEC Response

No comment.

General Comment 3

Section II, Condition 10: 40 C.F.R. Part 70.6 (c)(5)(iii) lists the necessary components of a Title V compliance certification, and requires that those components be included in the Title V permits. While Facility-Wide Condition # 10 of the permit does require that the source submit an annual compliance certification, the condition does not specify that the permit should specifically state that the source is required to submit compliance certifications consisting of the required components. Further, those required components should be listed in the permit.

In this case the list from 40 C.F.R. Part 70.6 (c)(5)(iii) is contained at Appendix TV-3. While it is sufficient to include the list in an Appendix to the permit, the required compliance certification components should at least be mentioned in the permit at the condition requiring the source to submit a Title V compliance certification to EPA. This will allow the requirement to be clear and enforceable. Therefore, Facility-Wide Condition # 10 of the permit should mention the required components listed at 40 C.F.R. Part 70.6 (c)(5)(iii), and reference the list contained at Appendix TV-3.

TEC Response

No Comment.

General Comment 4

Section III, Condition A.2.b, B.2.b, and C.2.b: These conditions cover the methods of operation for Steam Generators No. 1 through No. 6, and state that new No. 2 fuel oil may be burned during startup, shutdown and malfunctions, and "includes, but is not limited to the emission unit, a new cyclone/mill or flame stabilization." Please explain what the "new cyclone/mill" is and how it is associated with the facility.

TEC Response

The term "new cyclone/mill" in this condition refers to the placement into service, or removal from service, of an additional existing fuel mill feeding the boiler or an individual cyclone in the case of the cyclone boilers. The addition or removal of these pieces of equipment is necessary as the load of the unit moves up and down. The reference to "new" is not intended to refer to equipment that is not currently a part of these units.

General Comment 5

Section III, Condition A.5.c.i.: This condition references the maximum percentage of wood derived fuel (W.F.) allowed to be ciphered with coal in Unit No. 3, which is "based on the W.F. blend ration (6.3%) + 10% = 7%." It is unclear how the 7 percent value was established given this calculation. Please clarify how the temporary 7 percent limit was calculated and revise this condition as appropriate.

TEC Response

The intent of this condition was to allow a blend ratio of 110% of the tested rate of 6.3%. This could be clarified as follows:

$$(6.3\%) + 10\%(6.3\%) = 7\%$$
 or $110\%(6.3\%) = 7\%$

General Comment 6

Section III, Condition E.1 Subsection E contains the permit conditions that are applicable to the fuel yard. Condition E.1 limits the twelve month throughput of coal and auxiliary fuel, consisting of TDF and W.F. (W.F. has been defined in the permit as "Wood Derived Fuel", and EPA Region 4 assumes that TDF stands for "Tire Derived Fuel"). While subsections of the permit pertaining to particular emission units did contain conditions that allow the combustion of W.F., none of the conditions for these emission units mentioned anything about allowing for the combustion of TDF. If TDF is to be combusted in any of the emission units at this facility, then the permit conditions that specify the authorized fuels must state that TDF is allowed to be burned. Further, any applicable limits related to the combustion of TDF must also be included in the permit.

TEC Response

The term "TDF" in this condition does refer to "Tire Derived Fuel". TEC is aware that TDF is not currently allowed to be burn at the facility and that additional permitting will be necessary to allow for the burning of this auxiliary fuel.

General Comment 7

<u>Section III, Condition E.7:</u> This condition refers to the limitations in condition E.3. Please verify whether this condition should reference condition E.4 instead.

TEC Response

TEC agrees that the reference should be changed from "E.3" to "E.4".

General Comment 8

Section III, Condition E.10: This condition refers to the emissions discussed in condition E.6. Please verify whether this condition should reference condition E.3 instead.

TEC Response

TEC agrees that the reference should be changed from "E.6" to "E.3".

General Comment 9

Periodic Monitoring: As you are aware, on April 14, 2000, the U.S. Court of Appeals for the D.C. Circuit issued an opinion addressing industry's challenge to the validity of portions of EPA's periodic monitoring guidance. See, Appalachian Power Co. v. EPA, No. 98-1512 (C.C. Cir., April 14, 2000). The Court found that "State permitting authorities [] may not, on the basis of EPA's guidance or 40 C.F.R. 70.6(a)(3)(i)(B), require in permits that the regulated source conducts more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test." While the permit contains testing from "time to time", as discussed in the court opinion, EPA does not consider these conditions sufficient to ensure compliance. In light of the court case, EPA is withholding formal objection regarding the adequacy of the periodic monitoring included in the permit for the following pollutants: Visible Emissions (VE) and Particulate Matter (PM). EPA's concerns are outlined below:

- Visible Emissions: The permit does not contain adequate periodic monitoring for visible emissions a. to demonstrate compliance with the limits specified in the conditions D.5, E.3, F.2, G.2, H.2, I.3, or K.2. Although the source is required to perform an annual method 9 test for each emission unit, a test only once per year will not be sufficient to assure that the visible emission standard for each emission unit has been complied with on a continuous basis. This is especially true for several of the emission units that are subject to a relatively stringent visible emissions standard (i.e. no more than 5 % opacity is allowed). It was noted, however, that Operation and Maintenance (O&M) Plans for Particulate Matter have been established for many of these units (see conditions E.9, F.5, G.5, and H.5) and that non-title V operating permits contain O&M plans for the units covered under subsections D and I. One option to resolve this comment would be to include language in the permit which creates an enforceable link between the O&M activities and the associated VE limits in the above-reference permit conditions, such that the visual inspections/observations required in the O&M plans would qualify as periodic monitoring. Another option would be to include new conditions in the permit to require the source to perform and record the results of a qualitative observation of opacity over a specified frequency for each emission unit that is subject to a visible emission standard. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted within 24 hours of the qualitative survey. As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the VE emission limitations for these units. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year
- b. Particulate Matter: The permit does not contain adequate periodic monitoring for particulate matter emissions to demonstrate compliance with the limits specified in conditions F.3, G.3, H.3, I.2, or J.2. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an

indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided.

While the permit does include parametric monitoring of emission unit and control equipment operations in the O&M plans for these units (see conditions A.4, B.5, C.4, F.5, G.5, and H.5), the parametric monitoring scheme that has been specified is not adequate. The parameters to be monitored and the frequency of the monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of the normal operating time. The Department should set the appropriate percentage of the operating time that would serve as trigger for this testing requirement.

As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the PM emission limitations for these units. The demonstration needs to identify the rational for basing the compliance certification on data from a short-term test performed once a year.

c. Particulate Matter: Condition I.2 contains particulate matter limits of 0.99 tons per year and 0.19 pounds per hour for each of the six fuel bunkers and rotoclones. This condition exempts these units from the provisions of the particulate matter RACT, which is allowed under 62-296.700(2), by limiting emissions from each unit to less than one ton per year. However, the permit does not provide a means to ensure that particulate matter emissions actually remain below this threshold. Condition I.5 states that these units are also subject to the Common Conditions outlined in Subsection K, and condition K.2, allows for compliance with a five percent visible emissions limit in lieu of particulate matter stack testing for units equipped with a baghouse. Since the fuel bunkers covered under Subsection I are not equipped with baghouses, the allowance in condition K.2 does not appear to apply for these units. There is also a visible emissions limit of 20 percent in condition I.3. To resolve this issue, please provide discussion in the statement of basis which gives assurance that emissions from these units qualify for the exemption, and demonstrate that sufficient monitoring is provided in the permit to assure compliance with the particulate matter limit.

TEC Response

TEC feels that adequate periodic monitoring has been incorporated into the permit conditions and that additional monitoring requirements are not warranted.



Department of Environmental Protection

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

David B. Struhs Secretary

File Baibara

September 19, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Karen A. Sheffield, P. E. General Manager, F. J. Gannon Station Tampa Electric Company P. O. Box 111 Tampa, Flonda 33601-0111

Re: EPA Objection to PROPOSED Title V Permit No.: 0570040-002-AV

F. J. Gannon Station

Dear Ms. Sheffield:

On September 8, 2000, via facsimile the Department received a timely written objection from the United States Environmental Protection Agency to the referenced proposed permit. A copy of EPA's objection is attached.

In accordance with Section 403.0872(8), Flonda Statutes (F.S.), the Department must not issue a final permit until the objection is resolved or withdrawn. Pursuant to Section 403.0872(8), F.S., the applicant may file a written reply to the objection within 45 days after the date on which the Department serves the applicant with a copy of the objection. The written reply must include any supporting materials that the applicant desires to include in the record relevant to the issues raised by the objection. The written reply must be considered by the Department in issuing a final permit to resolve the objection of EPA. Please submit any written comments you wish to have considered concerning the objection to Scott M. Sheplak, at the above letterhead address.

Pursuant to 40 CFR 70.8(c)(4) the Department will have to resolve the objection by issuing a permit that satisfies EPA within 90 days of the objection, or EPA will assume authority for the permit. (Day 90=December 6, 2000)

If you should have any other questions, please contact Scott M. Sheplak at (850) 921-9532.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/sms/k

Enclosures

cc: Gregory Nelson, D.R.
James Hunter, TEC
Thomas Reese, Esq.
Gail Kamaras, Legal Environ. Assistance Foundation

Thomas Davis, ECT
Bill Thomas, SWD
Jerry Campbell, EPCHC
Patricia Comer, Esq.

"More Protection, Less Process"

Printed on recycled paper.

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

Nhom & Date Delivery to Whom, & Date Delivery to Whom, & Addresses's Address

TOTAL Postage & Fees

Postmark or Date

For Postmark or Date

Special Delivery Fee

Special Delivery F

US Postal Service
Receipt for Certified Mail
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)
Ms. Karen Sheffield, P. E.
General Manager, F. J. Gannon Station
Tampa Electric Company
P. O. Box 111
Tampa, FL 33601-0111

7

11 099 OT2

| SENDER: SECTION | COMPLETE THIS SECTION ON DELIVERY |
|---|---|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Ms. Karen Sheffield, P. E. General Manager, F. J. Gannon Station Tampa Electric Company P. O. Box 111 Tampa, FL 33601-0111 | A. Received by (Please Print Clearly) B. Date of Delivery SEP Agent Addressee D. Is delivery address different from item 1? If YES, enter delivery address below: |
| | 3. Service Type X Certified Mail |
| 2. Article Number (Copy from service label) 2. Article Number (Copy from service label) P\$-Form 3811, July 1999 , Domestic Ret | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

CCAIR

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP

8 2000

RECEIVED

SEP. 13 2000

DIVISION OF AIR RESOURCES MANAGEMENT

4APT-ARB

Howard L. Rhodes, Director Department of Environmental Protection Division of Air Resources Management Mail Station 5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400

SUBJ: EPA's Review of Proposed Title V Permit No. 0570040-002-AV Tampa Electric Company - F. J. Gannon Station

Dear Mr. Rhodes:

The purpose of this letter is to notify the Florida Department of Environmental Protection (FDEP) that the U.S. Environmental Protection Agency (EPA) formally objects to the issuance of the above referenced proposed title V operating permit for the Tampa Electric Company - F. J. Gannon Station, located in Hillsborough County, Florida, which was received by EPA, via e-mail notification and FDEP's web site, on July 26, 2000. This letter also provides our general comments on the proposed permit.

Based on EPA's review of the proposed permit and the supporting information received for this facility, EPA objects, under the authority of Section 505(b) of the Clean Air Act ("the Act") and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the proposed title V permit for this facility. The basis for EPA's objection is that the permit incorrectly identifies several requirements as "not Federally enforceable," does not fully meet the periodic monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i), does not contain conditions that assure compliance with all applicable requirements, as required by 40 C.F.R. § 70.6(a), and contains Acid Rain requirements that do not adequately implement the Acid Rain regulations applicable to this facility. Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. Part 70 and assure compliance with applicable requirements of the Clean Air Act. The enclosure also contains general comments applicable to the permit.

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or the requirements of 40 C.F.R. Part 70. Section 70.8(c)(4) of the title V regulations and

Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA, and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be resolved prior to the expiration of the 90-day period.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief of the Operating Source Section, at (404) 562-9141. Should your staff need additional information, they may contact Ms. Elizabeth Bartlett, Florida Title V Contact, at (404) 562-9122 or Ms. Lynda Crum, Associate Regional Counsel, at (404) 562-9524.

Sincerely,

Winston A. Smith

Director 1

Air, Pesticides and Toxics Management Division

Enclosure

cc: Ms. Karen A. Sheffield, P.E., TEC- F. J. Gannon Mr. Scott Sheplak, P.E., FDEP (via e-mail)

Enclosure

U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit Tampa Electric Company F. J. Gannon Station Permit no. 0570040-002-AV

I EPA Objection Issues

- 1. Federally Enforceable Requirements: Section II, conditions 6, 7, 11 and 12 are identified as "not federally enforceable." Conditions 6 and 7 are federally enforceable because they are contained in the federally approved portion of the Florida SIP. Conditions 11 and 12 address the requirement to provide compliance notifications and notification of potential permit modifications to the Environmental Protection Commission of Hillsborough County (EPCHC) and EPA, and provide the appropriate mailing addresses. Pursuant to 40 C.F.R. §70.6(c)(5)(iv), compliance certifications shall be submitted to the Administrator as well as to the permitting authority. Therefore, these conditions are also federally enforceable since they are part of the required elements of a title V permit.
- 2. <u>Appropriate Averaging Times</u>: The emission limits in conditions D.5, E.3, F.1, F.2, F.3, G.1, G.2, G.3, H.1, H.2, H.3, I.1, I.2, I.3, J.2, J.6, J.33.a., and K.2 do not contain averaging times. Appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. This deficiency may be addressed by including a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Based on review of operating permits for F. J. Gannon Steam Generators No. 1 through No. 6, Region 4 recommends that condition J.2 specify an averaging time of two hours for particulate emissions from these units. Since the facility already uses this averaging time to evaluate compliance with the particulate matter limit for all but one of these units, the Department should include the same averaging time in the title V permit.

3. Compliance Assurance - Excess Emissions: Section III, conditions A.6, B.7, and C.5 allow TECO to bypass the ESP's and vent emissions from the slag tanks directly to the atmosphere, for the purposes of providing worker safety during maintenance, and to prevent equipment damage in the case of a loss of flow through the normal duct system to the ESP. While EPA Region 4 recognizes that such ventings may be necessary in limited circumstances, these conditions, as written, are overly broad for the circumstances they are intended to cover and

appear to automatically exempt all events of excess emissions from the slag tanks. An automatic exemption from enforcement, such as this, is known as a "No Action" Assurance. No action assurances are expressly prohibited by EPA (Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring, Policy Against "No Action" Assurances, November 16, 1984). The decision as to whether or not any particular excess emission event may or may not be allowed should be left up to the discretion of the FDEP and EPCHC, and should be evaluated on a case by case basis.

In addition, this excess emissions variance appears to conflict with the circumvention prohibition under 62-210.650, F.A.C., which states that "No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly." While Florida regulations allow FDEP to extend the duration of excess emissions under 62-210.700(5), F.A.C., there does not appear to be a similar variance allowed for the circumvention prohibition referenced above. In addition, slag tank venting to prevent equipment damage due to loss of flow through the normal duct system to the ESP appears to fall under existing malfunction provisions of the excess emissions requirements, so it is unclear why a specific variance is provided. Furthermore, item (b) of these conditions appears to limit the duration of these events to two-hours, as does the excess emissions rules, so the utility of a separate condition is also unclear.

Finally, one portion of this condition does not make sense as it is written. This portion of the condition states:

The permittee shall notify the Southwest District and EPCHC should a situation develop which requires the venting of more than the equivalent of one slag tank volume per each emergency to correct the situation in a timely manner, not to exceed two hours.

It appears as though this is a run-on sentence. The first part of the sentence, that requires the reporting of excess emissions of greater than one slag tank volume, appears to have been combined with a sentence that requires excess emissions to be corrected in a timely manner, and that does not allow excess emissions to exceed two hours. This portion of the condition should be changed so that it is clearer to the reader.

4. <u>Periodic Monitoring:</u> As outlined below, the proposed title V permit for the F. J. Gannon Station does not contain adequate periodic monitoring requirements to assure compliance with all emissions and operational limits contained in the permit. All Title V permits must contain monitoring that is sufficient to assure

compliance with the applicable permit requirements. 40 C.F.R. Part 70.6(a)(3)(i)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to assuring compliance, a system of periodic monitoring should also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, periodic monitoring requirements sufficient to assure compliance with all permit limits must be incorporated in the permit or a technical demonstration must be included in the statement of basis explaining the rationale for the approach used by the Department to address periodic monitoring requirements for these units.

- Maximum Operating Rates: Conditions F.1, G.1, H.1, and I.1 specify the maximum operating rates for fly ash and fuel handling equipment identified as, EU-009, EUs -010 and -012, EU-011, and EUs -013 through -018, respectively. However, the permit does not provide for periodic monitoring sufficient to assure compliance with these operating rate limitations. For other units included in this permit, there is a permitting note clarifying that these conditions are not included as limits, but as a basis for determining the percent capacity of the units during source testing (see A.1, and B.1). Please add periodic monitoring provisions to the permit to address conditions F.1, G.1, H.1, and I.1, or add clarifying language to discuss why these conditions are not included as limits.
- b. Normal Operating Temperature: Conditions J.33.b and J.34.d only allow boiler cleaning waste and used oil, respectively, to be fed to boilers 1 through 6 if these units are operating at "normal source operating temperatures."
- 5. Applicable Requirements Consent Decree: The Gannon permit requires TECO to comply with the Consent Decree (CD) entered into between the United States and TECO on February 29, 2000; however, the specific terms and conditions of the Consent Decree have not been incorporated into the permit. Part 70.6(a)(1) requires a title V permit to include those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. Where necessary, 70.5(c)(8) requires a permit to include a schedule of compliance that is at least as stringent as that contained in any judicial consent decree, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. Therefore, the text of this permit should be reworked to incorporate the terms and conditions of the Consent Decree. Further, because the permit and Consent Decree contain so many related provisions, facility personnel would benefit from having all the relevant requirements included in one document. For example, EPA Region 4

recommends that at least the following changes/additions be incorporated into the permit:

a. The consent decree requires that at least 200 MW of coal-fired generating capacity at the Gannon Station be repowered by 5/01/03, and that at least the difference between 550 MW of coal-fired generating capacity and the amount of coal-fired generating capacity that was repowered prior to 5/01/03, be repowered by 12/31/04. In addition, all coal-fired boilers (six units totaling 1194 MW) at the Gannon Station are to be shut down by 12/31/04, and no combustion of coal is allowed at the plant after 1/01/05. These shut down units are allowed to be kept in reserve/standby if not repowered. However, if the reserve/standby units are ever to be restarted, then a PSD permit is required prior to the restart.

The consent decree has left TECO the latitude to determine which units to repower, which units to leave in reserve/standby, the exact schedule of repowering and shutdown, etc.. Therefore, the permit does not need to specify which units are to be repowered/shutdown, or specify anything concerning the new emission units that will be constructed as a result of the repowering projects (emission limits, controls, etc.), until TECO applies to amend the permit when required to do so. However, the general requirements (minimum MWs to be repowered, shutdown of remaining units, no further combustion of coal, etc.) should be included in the permit, because these are requirements of a federally enforceable consent decree that will not change, and will take effect within the five year time period prior to permit expiration.

- b. Change the renewal application due date to January 1, 2004 and the expiration date to December 31, 2004. Paragraph 42 of the CD requires TECO to submit a permit application or request an amendment to the existing permit no later than January 1, 2004. Paragraph 28 of the CD requires TECO to stop burning coal at any unit at Gannon no later than January 1, 2005.
- c. Change paragraphs A.2, B.2 and C.2 to reflect TECO's commitment to stop burning coal no later than January 1, 2005 by including a statement that it will be switching fuels to only use natural gas no later than January 1, 2005.
- d. The permit should clearly reflect TECO's commitment, as outlined in Paragraph 46 of the CD, to either use its emission allowances internally or give them up. It does not appear to do so at all.
- 6. <u>Acid Rain Requirements:</u> The following items from Section IV, Phase II Acid Rain Part, must be corrected in order to make the requirements consistent with the Acid Rain regulations applicable to this facility:

- a. Phase II of the Acid Rain Program began on January 1, 2000, which is the date by which initial Phase II permits for existing phase II units are to be effective (40 C.F.R. 72.73(b)(2), "State Issuance of Phase II Permits". However, the effective date proposed for the title V permit containing the Phase II Acid Rain Part for the F.J. Gannon Station is January 1, 2001. The permit needs to clarify that the effective period for the Phase II Acid Rain Part is five years beginning January 1, 2000.
- b. Section IV. "Phase II Acid Rain Part", lists the Acid Rain, Phase II SO₂ allowance allocations for the F.J. Gannon units GN03, GN04, GN05 and GN06 for the years 2001 through 2005. The SO₂ requirements under the Acid Rain Program are effective beginning January 1, 2000, therefore, the permit needs to be revised to include allowance allocations for these units for the year 2000.
- c. Section IV. "Phase II Acid Rain Part", indicates the Phase II NO_x limitations for the years 2001 through 2004 for the F.J. Gannon units GN03, GN04, GN05 and GN06. The Phase II NO_x Averaging Plan submitted by the source (signed December 20, 1999) indicates that the plan is to be effective for the years 2000 through 2004. The permit needs to be revised to include NO_x limits for the year 2000. In addition, since the proposed expiration date of the Title V permit is December 31, 2005, the permit will need to be revised to include Phase II NO_x emission limits for the year 2005. The permits will also need to contain a Phase II NO_x Compliance Plan submitted by the source indicating how the source plans to comply with the Phase II NO_x emission limits for the year 2005.
- d. The heat input value specified under the NOx limit for the units GN03, GN04 do not match those specified in the Phase II NOx Averaging Plan submitted by TECO. Please revise the Phase II Acid Rain Part of the permit to be consistent with the Averaging Plan.

II General Comments

- 1. <u>General Comment</u>: Please note that EPA reserves the right to enforce any noncompliance, including any noncompliance related to issues that have not been specifically raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.
- 2. <u>Placard Page Acid Rain:</u> The "Referenced attachments made part of this permit," should include the Phase II Acid Rain Part application referred to in

Section IV of the permit (Phase II SO2 Acid Rain Application/Compliance Plan received December 26, 1995).

3. Section II. Condition 10: 40 C.F.R. Part 70.6 (c)(5)(iii) lists the necessary components of a Title V compliance certification, and requires that those components be included in Title V permits. While Facility-Wide Condition # 10 of the permit does require that the source submit an annual compliance certification, the condition does not specify that the compliance certification contain those required components. This portion of the permit should specifically state that the source is required to submit compliance certifications consisting of the required components. Further, those required components should be listed in the permit.

In this case the list from 40 C.F.R. Part 70.6 (c)(5)(iii) is contained at Appendix TV-3. While it is sufficient to include the list in an Appendix to the permit, the required compliance certification components should at least be mentioned in the permit at the condition requiring the source to submit a Title V compliance certification to EPA. This will allow the requirement to be clear and enforceable. Therefore, Facility-Wide Condition # 10 of the permit should mention the required components listed at 40 C.F.R. Part 70.6 (c)(5)(iii), and reference the list contained at Appendix TV-3.

- 4. <u>Section III, Conditions A.2.b, B.2.b, and C.2.b</u>: These conditions cover the methods of operation for Steam Generators No. 1 through No.6, and state that new No. 2 fuel oil may be burned during startup, shutdown and malfunctions, and "includes, but is not limited to the emission unit, a new cyclone/mill or flame stabilization." Please explain what the "new cyclone/mill" is and how it is associated with the facility.
- 5. <u>Section III, Condition A.5.c.i.</u>: This condition references the maximum percentage of wood derived fuel (W.F.) allowed to be ciphered with coal in Unit No. 3, which is "based on tested W.F. blend ration (6.3%) + 10% = 7%." It is unclear how the 7 percent value was established given this calculation. Please clarify how the temporary 7 percent limit was calculated and revise this condition as appropriate.
- 6. Section III, Condition E.1 Subsection E contains the permit conditions that are applicable to the fuel yard. Condition E.1 limits the twelve month throughput of coal and auxiliary fuel, consisting of TDF and W.F. (W.F. has been defined in the permit as "Wood Derived Fuel", and EPA Region 4 assumes that TDF stands for "Tire Derived Fuel"). While subsections of the permit pertaining to particular emission units did contain conditions that allow the combustion of W.F., none of the conditions for these emission units mentioned anything about allowing for the combustion of TDF. If TDF is to be combusted in any of the emission units at

this facility, then the permit conditions that specify the authorized fuels must state that TDF is allowed to be burned. Further, any applicable limits related to the combustion of TDF must also be included in the permit.

- 7. <u>Section III, Condition E.7:</u> This condition refers to the limitations in condition E.3. Please verify whether this condition should reference condition E.4 instead.
- 8. <u>Section III, Condition E.10:</u> This condition refers to the emissions discussed in condition E.6. Please verify whether this condition should reference condition E.3 instead.
- 9. Periodic Monitoring: As you are aware, on April 14, 2000, the U.S. Court of Appeals for the D.C. Circuit issued an opinion addressing industry's challenge to the validity of portions of EPA's periodic monitoring guidance. See, Appalachian Power Co. v. EPA, No. 98-1512 (D.C. Cir., April 14, 2000). The Court found that "State permitting authorities [] may not, on the basis of EPA's guidance or 40 C.F.R. 70.6(a)(3)(i)(B), require in permits that the regulated source conducts more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test." While the permit contains testing from "time to time," as discussed in the court opinion, EPA does not consider these conditions sufficient to ensure compliance. In light of the court case, EPA is withholding formal objection regarding the adequacy of the periodic monitoring included in the permit for the following pollutants: Visible Emissions (VE) and Particulate Matter (PM). EPA's concerns are outlined below:
 - a. Visible Emissions: The permit does not contain adequate periodic monitoring for visible emissions to demonstrate compliance with the limits specified in conditions D.5, E.3, F.2, G.2, H.2, I.3, or K.2. Although the source is required to perform an annual method 9 test for each emission unit, a test only once per year will not be sufficient to assure that the visible emission standard for each emission unit has been complied with on a continuous basis. This is especially true for several of the emission units that are subject to a relatively stringent visible emissions standard (i.e. no more than 5 % opacity is allowed). It was noted, however, that Operation and Maintenance (O & M) Plans for Particulate Matter have been established for many of these units (see conditions E.9, F.5, G.5, and H.5) and that non-title V operating permits contain O & M plans for the units covered under subsections D and I. One option to resolve this comment would be to include language in the permit which creates an enforceable link between the O & M activities and the associated VE limits in the above-reference permit conditions, such that the visual inspections/observations required in the O & M plans would qualify as periodic monitoring. Another option would be to include new conditions in

the permit to require the source to perform and record the results of a qualitative observation of opacity over a specified frequency for each emission unit that is subject to a visible emission standard. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted within 24 hours of the qualitative survey. As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the VE emission limitations for these units. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year.

b. Particulate Matter: The permit does not contain adequate periodic monitoring for particulate matter emissions to demonstrate compliance with the limits specified in conditions F.3, G.3, H.3, I.2, or J.2. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided.

While the permit does include parametric monitoring of emission unit and control equipment operations in the O & M plans for these units (see conditions A.4, B.5, C.4, F.5, G.5, and H.5), the parametric monitoring scheme that has been specified is not adequate. The parameters to be monitored and the frequency of monitoring have been specified in the permit, but the parameters have not been set as enforceable limits. In order to make the parametric monitoring conditions enforceable, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of the normal operating time. The

Department should set the appropriate percentage of the operating time that would serve as trigger for this testing requirement.

As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the PM emission limitations for these units. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year.

c. Particulate Matter: Condition I.2 contains particulate matter limits of 0.99 tons per year and 0.19 pounds per hour for each of the six fuel bunkers and rotoclones. This condition exempts these units from the provisions of the particulate matter RACT, which is allowed under 62-296.700(2)(c), by limiting emissions from each unit to less than one ton per year. However, the permit does not provide a means to ensure that particulate matter emissions actually remain below this threshold. Condition I.5 states that these units are also subject to the Common Conditions outlined in Subsection K, and condition K.2, allows for compliance with a five percent visible emissions limit in lieu of particulate matter stack testing for units equipped with a baghouse. Since the fuel bunkers covered under Subsection I are not equipped with baghouses, the allowance in condition K.2 does not appear to apply for these units. There is also a visible emissions limit of 20 percent in condition I.3. To resolve this issue, please provide discussion in the statement of basis which gives assurance that emissions from these units qualify for the exemption, and demonstrate that sufficient monitoring is provided in the permit to assure compliance with the particulate matter limit.