



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

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SECRETARY

November 1, 2013

Electronic Mail – Received Receipt Requested

Mr. Ronald D. Bishop, Director
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601

Re: Request for Additional Information

Project No. 0570039-066-AC, Draft Air Construction Permit Revision
Project No. 0570039-067-AV, Draft/Proposed Title V Air Operating Permit Revision
Tampa Electric Company, Big Bend Station

Dear Mr. Bishop:

On September 13, 2013, we received your application and sufficient fee for updating and modifying multiple air construction permits and the incorporation of the revised conditions into the Title V air operation permit (Project No. 0570039-067-AV) at Big Bend Station. The facility is located in Hillsborough County at 13031 Wyandotte Road in Apollo Beach, Florida. The application is incomplete as submitted. In order to continue processing your application, the Department will need the additional information requested below pursuant to Rule 62-213.420(1)(b)2., Florida Administrative Code (F.A.C.), and Rule 62-4.070(1), F.A.C. Should your response to any of the items below require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. **Consent Final Judgment:** The application requests removal of the reference to the Consent Final Judgment (Florida Department of Environmental Protection [FDEP] vs. TEC) dated December 16, 1999, throughout the Title V air operating permit. Please provide the official consent decree dissolving the Consent Final Judgment. [Rule 62-4.070 (Reasonable Assurance), F.A.C]
2. **Fuel Oil:** Emission Units (EU) 041 and 042, which are simple cycle combustion turbines (SCCT), are permitted to fire pipeline quality natural gas and ultra low sulfur diesel (ULSD) fuel containing a maximum sulfur content of 0.0015% by weight. However, the requested revision in the facility description stated that the SCCT fires natural gas and No. 2 distillate oil. Please clarify. [Rule 62-4.070 (Reasonable Assurance), F.A.C]
3. **Modification and Heat Input Rate: Conditions A.2. and B.2.** require an air construction permit before making any physical or operational changes that would increase the actual heat input rate capabilities of Units 1 – 4 (EU 001 – EU 004). An air construction permit is required in accordance with Rule 62-210(205), F.A.C. *Modification - any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.* If any physical or operational changes are made to these units that result in an increase in the actual heat input rate which results in an increase in the actual emissions an air construction permit is required. Please provide information to support the requested change showing that if the heat input is increased via physical or operation changes the actual emissions will not increase. [Rules 62-210.200(PTE); and 62-4.070 (Reasonable Assurance), F.A.C]
4. **Determination of Heat Input: Condition A.54. and B.54.** requires the composite fuel samples be collected by on-site personnel in accordance with ASTM standards to determine heat input. The application requests that the fuel sample be collected by industry standard practices. Please provide the industry standard practices. [Rule 62-4.070 (Reasonable Assurance), F.A.C]
5. **PM and VE Compliance Test: Condition A.56.** specifies the operating conditions for Units 1 - 3 need to be tested for particulate matter (PM) and visible emissions (VE) during re-injecting/not re-injecting fly ash. The requested

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revision includes a flyash content of any fuel blend limit of 10% by weight. Please clarify if this revision is intended to establish a limit of the flyash content to the fuel blends? Please provide supporting test results for Units 1 – 3 demonstrating compliance with PM and VE with 10% flyash content. [Rule 62-4.070 (Reasonable Assurance), F.A.C]

6. Quarterly SO₂ Report: **Condition A.60.** requires SO₂ emissions to be reported quarterly based on 2, 3 and 24-hour averaging periods in accordance with emission standards established in Rule 62-296.405(1)2.b., F.A.C. and 30-day rolling average in accordance with emissions standards established in Permit 0570039-60-AC. Please identify where this condition originated from. [Rule 62-4.070 (Reasonable Assurance), F.A.C]
7. VE Testing: The application requests that EU 008, 009, 012 – 017, 020 - 023, 029, 030, 033, 034, and 037 - 039 be revised to require a VE test annually and/or prior to renewal if the emissions unit operated for less than 400 hours. Pursuant to Rule 62-296.711(2) and (3), F.A.C (Materials Handling, Sizing, Screening, Crushing and Grinding Operations) the VE test is done in lieu of the PM stack test and is required to be done annually. Annual compliance testing will meet the testing requirement prior to renewal. Please provide the following information to determine if the these emission units meet the exemption requirements of Rule 62-296.700(1)(b)2., F.A.C.:
 - a. Any facility with total maximum allowable emissions of PM of less than 15 tons/year (TPY) and 5 pounds/hour (lb/hour).
 - b. Any facility whose owner or operator demonstrates to the Department that the impact within the designated air quality maintenance area of the total maximum allowable PM emissions from such facility will not 63 exceed 1 microgram/cubic meter (ug/m³) , annual average, and 5 ug/m³ , 24-hour average.
 - c. Any emissions unit which has total allowable emissions of PM of less than 1 TPY.
 - d. Any emissions unit of unconfined PM which is located more than five kilometers outside the boundary of a PM air quality maintenance area.
 - e. Any emissions unit of unconfined PM from open stockpiling of materials, vehicular traffic and other emissions from roads and plant grounds, or construction activities.
 - f. Any moveable drop transfer point where the discharge point and receiving point of the materials being handled must be moved in relationship to each other, either continuously or intermittently, such that enclosure of the drop transfer point with a device to control emissions of PM is not practicable.
 - g. Please provide the provide diagrams, engineering drawings including all PM controls, drop points, vents and/or emission points to fully understand the processes. In addition, please include the following information the following specific emission units:
 - (1) For EU 020 (Drops from Limestone Conveyors LE, LF and LG and Silo C Belt Feeder with Baghouse) please identify if the system are enclosed and vented into Silo C?
 - (2) For the Coal Bunkers and Roto-Clones (EU 015 – EU 017, and EU 039) please identify if there is a common head space above the coal bunkers.

[Rule 62-4.070 (Reasonable Assurance), F.A.C]

8. Fugitive Emissions: The application requests the removal VE testing from Fugitive Emissions from Fuel Unloading and Handling Operations (EU 010). The emission unit description includes a table identifying confined and unconfined emission points. Are the confined emission points completely enclosed with no vents? Please describe unconfined emission points and to better understand the process please provide a diagram of this process. [Rule 62-4.070 (Reasonable Assurance), F.A.C]
9. Limestone Handling Conveyors: The application requests the Limestone Handling Conveyors LB to Conveyor LC with Baghouse and Conveyors LD to Conveyor LC with Baghouse (EU 023) be split into two different EU identification numbers (EU 023 and 024). This can be done; however, the number will not be in sequence, i.e., EU 024 cannot be used. Please confirm this is sufficient. [Rule 62-4.070 (Reasonable Assurance), F.A.C]
10. Diesel Compressors: Are the abrasive blasting diesel compressors identified in **Condition J.2.** subject to New Source Performance Standards (NSPS), Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) and/or National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ (NESHAP for Reciprocating Internal Combustion Engines)? Please provide the year

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manufactured, date the engines were ordered, brake horse-power, engines displacement, and hours of operation (emergency engines). [NSPA Subpart IIII and NESHAP Subpart ZZZZ; Rule 62-4.070 (Reasonable Assurance), F.A.C]

11. Nitrogen Oxides (NO_x) Emission Limits: The application requests removal of NO_x emission limits in **Condition O.8** for SCCT 4A and 4B (EU 041 and EU 042). The NO_x emission standards of 32 pounds per hour (lb/hr) for each SCCT at 15% oxygen (O₂) when firing natural gas, and when firing ULSD fuel 42 parts per million (ppm) at 15% O₂ and 51.3 lb/hr at 15% O₂ for each SCCT were established in Air Construction Permit No. 0570039-040-AC for purposes of escaping Prevention of Significant Deterioration (PSD) new source review requirements, which became State Implementation Plan (SIP) limits in the permit. To address the requested revision for NO_x emissions, please provide the following information:
- a. A technical write up explaining the requested changes in the emission standards.
 - b. Permit application form including emission unit pollutant detailed information.
 - c. Calculations determining baseline actual-to-projected actual emissions.
 - d. Any supporting documentation for the requested changes.
- [Rules 62-210.200(PTE); and 62-4.070 (Reasonable Assurance), F.A.C]
12. Compliance Tests Prior to Renewal: The application requests to modify **Condition O.25** for SCCT 4A and 4B (EU 041 and EU 042) to state that a compliance test for VE prior to removal is not required for an emissions unit if the emissions unit operated for less than 400 hours during the year prior to renewal. In accordance with Rule 62-297.310(7)8., F.A.C. any combustion turbine that does not operate for more than 400 hours/year shall conduct a VE compliance test once per each five-year period. Please confirm.
- [Rule 62-4.070 (Reasonable Assurance), F.A.C]

The above information is requested pursuant to the following F.A.C. regulations: Rule 62-4.050 (Procedures to Obtain Permits and Other Authorizations; Applications); 62-4.055 (Permit Processing); 62-4.070 (Standards for Issuing or Denying Permits; Issuance; Denial); 62-4.120 (Construction Permits); 62-204.800 (Federal Regulations Adopted by Reference); 62-212.300 (Permits Required); 62-210.370 (Emissions Computations and Reporting); 62-210.900 (Forms and Instructions); 62-212.300 (General Preconstruction Review); and 62-212.400 (Prevention of Significant Deterioration). All applications for a Department permit must be certified by a professional engineer registered in the State of Florida pursuant to Rule 62-4.050(3), F.A.C. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official.

We will resume processing your application after receipt of the requested information. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or to provide a written request for an additional period of time to submit the information. If you have any questions regarding this matter, please contact the project engineer, Tammy McWade, at 850/717-9086 or email ttmcwade@dep.state.fl.us.

Sincerely,

for: Jeffrey F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

This letter was sent to the following people by electronic mail with received receipt requested.

Mr. Ronald Bishop, TEC: rdbishop@tecoenergy.com
Mr. Byron Burrows, TEC: btburrows@tecoenergy.com
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