



Florida Department of Environmental Protection

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

(Sent by Electronic Mail – Return Receipt Requested)

Mr. Ronald Bishop, Director – Big Bend Station
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Re: Title V Air Operation Permit Revision
Proposed Permit No. 0570039-110-AV
Big Bend Station

Dear Mr. Bishop:

One copy of the proposed permit determination for the revision of the Title V air operation permit for the Big Bend Station located at 13031 Wyandotte Road, Hillsborough County, is enclosed. This letter is only a courtesy to inform you that the draft permit has become a proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. Interested persons may view the proposed permit by visiting the following website:

<https://fldep.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the proposed Title V air operation permit is made by the USEPA within 45 days, the proposed permit will become a final permit no later than 55 days after the date on which the proposed permit was mailed (posted) to USEPA. If USEPA has an objection to the proposed permit, the final permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Lara Rabbath, at 850/717-9082.

Executed in Tallahassee, Florida.

For:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr/lcr

Copies sent by electronic mail to the following:

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Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

PROPOSED PERMIT DETERMINATION

Permit No. 0570039-110-AV

I. Public Notice.

An Intent To Issue Air Permit issued to Tampa Electric Company for the Big Bend Station located at 13031 Wyandotte Road, Hillsborough County, was clerked on August 4, 2017. The Public Notice Of Intent To Issue Air Permit was published in La Gaceta Newspaper on August 18, 2017. The draft Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice Of Intent To Issue Air Permit was received on August 18, 2017.

II. Public Comment(s).

No comments on the draft permit were received from the public or the Local Air Program. However, on August 22, 2017, the Department received minor comments from the applicant in the form of suggested edits/revisions. The following summarizes the comments and the Department's responses.

1. *Comment.* The applicant requests revising Specific Condition **A.32.** to streamline and correct some of the permitting conditions to include natural gas provisions.

Response. The Department is in agreement to revise the recording requirements as established in Permit No. 0570039-109-AC. Specific Condition **A.32.** has been revised as follows:

A.32.—Operational Records. The permittee shall establish and maintain the following daily records from the firing of natural gas and solid fuel in steam generator Units 1 - 3:

- a. Record the heat input rate from the firing of solid fuels. The permittee shall maintain daily records of operation showing the date, fuels used, and the duration of all startups, shutdowns and malfunctions. Fuel bunkering and petroleum coke usage (weight percent of petroleum coke fired) records shall be maintained on a daily basis to document the percentage limitation on petroleum coke has not been exceeded. The records shall document the solid fuel analyses containing information on sulfur content, ash content, and heating values.
- b. Record the heat input rate from the firing of natural gas. The standard heating value of natural gas, 1,020 Btu/scf, shall be used to calculate the natural gas heat input rate.
- c. The standard heating value of natural gas, 1,020 Btu/scf, shall be used to calculate the natural gas heat input rate.
- d. c. Records of the heat input rates of all fuels shall be maintained on-site and made available upon request. The permittee shall maintain daily records of operation showing the date, fuels used, and the duration of all startups, shutdowns and malfunctions. Fuel bunkering and petroleum coke usage (weight percent of petroleum coke fired) records shall be maintained on a daily basis to document the percentage limitation on petroleum coke has not been exceeded. The records shall document the amount of natural gas burned and the solid fuel analyses containing information on sulfur content, ash content, and heating values.

[Rules 62-213.440(1) (Monitoring), F.A.C. and Permit No. 0570039-109-AC]

2. *Comment:* The applicant requests to revised Specific Conditions **A.36.** (SO₂ Reporting), **A.37** (Quarterly NO_x Report). and **A.38.** (Quarterly PM Report), to clarify that excess emissions will be included in the quarterly emissions report and not as a separate report.

Response. The Department included the applicable reporting requirements for excess emissions, pursuant to Rules 62.210.700(5), 62-213.440 and 62-296.405(1)(g). Specific Condition **A.36.** is also changed from the draft permit because the boilers are no longer firing liquid fuels and are therefore, not subject to the SO₂ limiting standards established in Rule 62-296.405(1), F.A.C. Specific Conditions **A.36.**, **A.37.** and **A.38.** have been revised as follows:

A.36. SO₂ Reporting.

- a. *Quarterly.* The permittee shall submit a quarterly SO₂ report and excess emission report to the EPCHC within 30 days following each calendar quarter. The quarterly SO₂ report shall consist of:

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- (1) 30-day rolling average SO₂ emissions for each Unit (Units 1 – 3) in lb/MMBtu; and,
 - (2) A statement of CEMS and/or boiler malfunction, start-up, shutdown or abnormal events.
- b. *Semiannual*. The permittee shall submit semiannual reports summarizing the SO₂ data for the reporting period and demonstrating compliance with the SO₂ emissions cap. Reports shall be submitted within 30 days following the reporting period. Each report shall summarize each 30-boiler operating day rolling average emission rate during the reporting period along with any background information to explain emissions.
- c. *Emissions Cap Exceedance*. If an exceedance of the SO₂ emissions cap occurs, the permittee shall notify the Compliance Authority within one business day. The permittee shall submit a report to the Compliance Authority within 15 days of occurrence detailing the nature and cause of the exceedance, describing corrective actions taken, and identifying when the unit(s) was returned to compliance.
- [Rule 62-213.440(1) (Monitoring), F.A.C.; and Permit No. 0570039-096-AC]

A.37. Quarterly NO_x Report. The permittee shall submit a quarterly NO_x report ~~and excess emission report~~ to the EPCHC within 30 days following each calendar quarter. This quarterly NO_x report shall consist of:

- a. The heat input weighted 30-day NO_x rolling average, all time periods of boiler operation; and,
- b. A statement of CEMS and/or boiler malfunction, start-up, shutdown or abnormal events.
- c. Emissions in excess of the emission limiting standard applicable to Unit 3 as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the source for a period of 5-years.

[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.38. Quarterly PM Report. The permittee shall submit a quarterly PM report ~~and excess emission report~~ to the EPCHC within 30 days following each calendar quarter. This quarterly PM report shall consist of:

- a. Normal Operation.
 - (1) The heat input weighted 30-day PM rolling average, all time periods of boiler operation; and,
 - (2) A statement of CEMS and/or boiler malfunction, start-up, shutdown or abnormal events.
 - (3) Emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the source for a period of 5-years.

[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

- b. ~~A statement of CEMS and/or boiler malfunction, start-up, shutdown or abnormal events.~~ Soot Blowing and Load Change. In case of excess emissions resulting from malfunctions, each owner or operator shall notify EPCHC in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-~~296.405(1)(g)~~210.700(5), F.A.C.]

3. *Comment*. The applicant requests revising Specific Condition **B.34.** to streamline and correct some of the permitting conditions to include natural gas provisions.

Response. The Department is in agreement to revise the recording requirements as established in Permit No. 0570039-109-AC. Specific Condition **B.34.** has been revised to resemble Specific Condition **A.32.**

4. *Comment*. The applicant also included administrative correction requests to Permit No. 0570039-101-AV. The applicant finds the current Title V air operation permit to be in conflict with the “approved” SIP, Rule 62-210.200 (185) F.A.C. and Rule 62-210.300 F.A.C. Specific Conditions **A.1.** and **B.1.** (Design Capacity) specifies “... the permittee shall obtain the appropriate air construction permits before making any physical or operational changes that would increase the actual heat input rate capabilities of a unit.”

The approved SIP and Florida Administrative Codes. Rule 62-210.200 (185) F.A.C. defines modification as follows:

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“Modification” means 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.

Furthermore, Rule 62-210.300 (1)(a) F.A.C. requires an air construction permit for any facility or emissions units that constitutes a “modification” as follows:

Unless exempt from permitting pursuant to paragraph 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new, reconstructed, or modified facility or emissions unit, or any new pollution control equipment prior to the beginning of construction, reconstruction pursuant to 40 CFR 60.15 or 63.2, or modification of the facility or emissions unit or addition of the air pollution control equipment; or to establish a PAL; in accordance with all applicable provisions of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C.

Tampa Electric believes that any physical change or operational changes that would increase the actual heat input rate capacity of a unit constitutes a “modification” pursuant to Rule 62-210.200 (185) F.A.C. Therefore, an air construction permit is required under Rule 62-210.300 F.A.C.

Tampa Electric requests the following changes to the Title V permit as follows:

A.1 Design Capacity. The maximum allowable heat input rate is as follows:

a. ***Boiler Design Capacity.*** These design heat input rates are based on the original design of each unit for firing coal with a certain lower heating value (LHV) that was used to design each boiler. At any given time, the actual heat input rate is a function of the actual demand load, the coal mass firing rate, and the fuel properties of the coal being fired at that time. The permittee shall obtain the appropriate air construction permits before making any physical or operational changes that would increase the actual heat input capacity of a unit and would constitute a “modification.” Although the above design capacities are not intended as operational restrictions, the permittee shall obtain the appropriate air construction permits before making any physical or operational changes that would increase the actual heat input rate capabilities of a unit. [Rules 62-210.200 (185) F.A.C. and 62-4, F.A.C.]

B.1 Design Capacity. The maximum allowable heat input rate is as follows:

a. ***Boiler Design Capacity.*** This design heat input rate is based on the original design of the unit for firing coal with a certain LHV that was used to design the boiler. At any given time, the actual heat input rate is a function of the actual demand load, the coal mass firing rate, and the fuel properties of the coal being fired at that time. The permittee shall obtain the appropriate air construction permits before making any physical or operational changes that would increase the actual heat input capacity of a unit and would constitute a “modification.” Although the above design capacity is not intended as an operational restriction, the permittee shall obtain the appropriate air construction permits before making any physical or operational changes that would increase the actual heat input rate capability of the unit. [Rules 62-210.200 (185) F.A.C. and 62-4, F.A.C.]

Response. The Department will not grant these changes to the permit language. This is because this language was put into place as a result of past discussions between the applicant and the Department. The agreement and limitations were based on the manufacturer’s standards, not the Department’s. Therefore, any changes that would increase the heat input rate, would require a physical change. This physical change, in turn, would trigger the need for a construction permit, creating the need for a modification.

III. Conclusion.

The enclosed proposed Title V air operation permit includes the aforementioned changes to the draft Title V air operation permit. The permitting authority will issue the proposed Permit No. 0570039-110-AV, with the changes noted above.