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DIVISION OF AIR
RESOURCE MANAGEMENT

August 3, 2012

Jeffery F. Koerner, Program Administrator
Florida Department of Environmental Protection
Division of Air Resource Management
Office of Air Permitting and Compliance
2600 Blair Stone Road, M.S. 5505
Tallahassee, Florida 32399-2400

Via FedEx
Airbill No. 7986-9632-0593

Re: Tampa Electric Company – Big Bend Station
Additional Comments to Draft Permits
No. 0570039-053-AC/0570039-054-AV
Facility ID No. 0570039

Dear Mr. Koerner:

On July 10, 2012, Tampa Electric Company (TEC) received an email correspondence from the Florida Department of Environmental Protection (DEP) announcing its intent to issue a draft air construction No. 0570039-053-AC and draft/proposed Title V permits No. 0570039-054-AV. The draft permits provides minor permit revisions to address annual testing conditions, heat input determination and administrative errors.

TEC published the Notice of Intent to Issue the Draft Air Permit in the legal section of the South Shore News and Tribune, which was published bi-weekly by the Tampa Tribune on July 25, 2012. The proof of publication was submitted to the DEP on July 26, 2012.

Upon subsequent review of the draft air permits, TEC identified some permit conditions and administrative errors that should be revised prior to the finalizing the draft permits. During the public comment period, TEC is submitting additional comments to the above referenced permits. A summary and description of the permit revisions and administrative errors are discussed below.

EPA Requested Revisions to Title V Permit to Close-out the Consent Decree

TEC proposes permit modifications to address Department of Justice comments for the closure of the Consent Decree No. 99-2524-T-23F at Big Bend Power Station. The revisions are proposed to address comments to Items 2 and 3 in a letter, dated July 18, 2011, from the Department of Justice to TEC.

- ***Item 2 - Completion and Operation of Certain Electrostatic Precipitator Projects***
- Appendix CP-1 Compliance Plan (Page CP-1 of 2), Permit No. 0570039-045-AV. The compliance plan should be revised as follows:

All of these projects shall be completed no later than December 31, 2015. All of these projects are expected to be completed no later than December 31, 2015.

- ***Item 3 - Does calculation of NO_x emissions under the facility's permit conform to the decree specified method?***

Section III, Subsections A and B, Permit No. 0570039-045-AV. The permit condition A.36 and B.35 should be revised as follows:

Section III, Subsections A and B, A.36 & B.35. NO_x Compliance by CEMS. Nitrogen oxides (NO_x) emissions shall be continuously monitored to confirm compliance, using the Unit's existing continuous emissions monitoring system (CEMS). Compliance is determined by calculating the heat input weighted average of all hourly emission rates for NO_x and BTUs commencing from the time the Unit is synchronized with a utility electric distribution system through the time that the unit ceases to be synchronized with such utility electric distribution system for the 30 successive boiler operating days, except for data obtained during ~~startup, shutdown~~; malfunction or abnormal events.

Air Construction Permit Comments

Technical Evaluation

- Solid Fuel Yard (EU 010), Section 3A, page 4 of 5. The Conveyors L1 & L2 and M1 & M2 to Coal Bunkers (FH-59-062) do not have an annual testing requirement. The particulate emissions from these conveyors have been reported in the annual operating report (AOR). These conveyors are located in enclosed buildings and are not considered sources of unconfined particulate emissions. The technical evaluation should be revised as follows:

Solid Fuel Yard (EU 010) - Conveyors L1 & L2 and M1 & M2 to Coal Bunkers (FH-59-062): Request to remove these emission points, since they are in an enclosed building, to allow for the removal of the annual testing reporting requirement from the Title V air operation permit.”

0570039-053-AC

- Responsible Official, Signature Page. Mr. Ronald D. Bishop is the Responsible Office for the Big Bend Station. Please correct the signature page to “Mr. Ronald D. Bishop, Director Big Bend Station” not “Ms. Karen Sheffield, General Manager.”

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- Project Description, page 2 of 11. Please confirm the project description should reference revisions to the following permits: 0570039-001-AC, 0570039-003-AC, 0570039-001-AC, 0570039-004-AC, 0570039-008-AC, 0570039-009-AC, 0570039-046-AC, 0570039-048-AC.
- The permit does not address changes (as amended) by 0570039-035-AC, 0570039-026-AC, 0570039-031-AC, 0570039-036-AC, 0570039-046-AC and 0570039-048-AC. Please confirm any changes.

PSD-FL-040

- Heat Input for Boiler 4, page 5 of 11. The heat input rate 4,330 mmBtu/hr is design limit and is not intended as an operational restriction. Therefore, please delete the reference "Continuous Limit" in Table 1 - Allowable Emission Limits.

Permits Nos. 0570039-001-AC, 0570039-003-AC, 0570039-004-AC, 0570039-012-AC and 0570039-016-AC.

- Fuels for Boiler 1, 2, and 3, Methods of Operation c.(1) Boiler Chemical Cleaning Waste, page 6 of 11. The facility was originally designed to evaporate up to 150,000 gallons per year. Unit No. 4 is a larger boiler that has a potential generate up to 300,000 gallons per year. Therefore, it is requested the condition be revised to evaporate up to 300,000 gallons per year as follows:

(1) Boiler Chemical Cleaning Waste. Evaporation of up to ~~300,000~~^{150,000} gallons per year, total at the facility, is allowed of non-hazardous, but potentially hazardous air pollutant (HAP)-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.

- Fuels for Boiler 1, 2, and 3, Methods of Operation c.(3)(c) Fly ash, page 6 of 11. Fly ash should be reinjected from all four (4) units. The reference to "Unit 4" should be removed to state: "Reinjection of Fly Ash into Units 1, 2, 3, and 4 for energy recovery."

Permits Nos. 0570039-008-AC, 0570039-009-AC, 0570039-012-AC, 0570039-016-AC and PSD-FL-040.

- Fuels for Boiler 4, Methods of Operation c.(1) Boiler Chemical Cleaning Waste, page 7 of 11. The facility was originally designed to evaporate up to 150,000 gallons per year. Unit No. 4 is a larger boiler that has a potential to generate up to 300,000 gallons per year. Therefore, it is requested the condition be revised to evaporate up to 300,000 gallons per year as follows:

(1) Boiler Chemical Cleaning Waste. Evaporation of up to ~~300,000~~^{150,000} gallons per year, total at the facility, is allowed of non-hazardous, but potentially hazardous air pollutant (HAP)-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.

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- Fuels for Boiler 4, Methods of Operation c.(3)(c) Fly ash, page 7 of 11. Fly ash should be reinjected from all four (4) units. The reference to “Unit 4” should be removed to state: “Reinjection of Fly Ash into Units 1, 2, 3, and 4 for energy recovery.”

Title V Air Permit Comments

0570039-054-AV

- Section I, Subsection C, page 4 of 107. Please reference E.U.-043 on the 40 CFR 63, Subpart ZZZZ, applicable requirements.

Applicable Requirement/Regulation	E.U. ID No(s).
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) also referred to as the “RICE Maximum Achievable Control Technology (MACT)”	<u>043</u> , 044

- Section III, Specific Conditions, page 8 of 107. Unit No. 1 is no longer equipped with an air flowing monitoring equipment. Unit No. 2 is no longer equipped with a neural network system. Please revised the unit description as follows:

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-001	Fossil Fuel Fired Steam Generator Unit No. 1
-002	Fossil Fuel Fired Steam Generator Unit No. 2
-003	Fossil Fuel Fired Steam Generator Unit No. 3

Unit No. 1 is a fossil fuel fired steam boiler electrical generating unit with a design capacity rating of 4,037 MMBtu/hour and a design electrical generating capacity of 445 megawatts (MW). ~~Unit No. 1 is equipped with coal and air flow monitoring equipment.~~ It is a wet bottom utility boiler manufactured by Riley Stoker Corporation. Nitrogen oxides (NO_x) emissions are controlled by low NO_x burners (LNB) and selective catalytic reduction (SCR) system, which was installed in 2010. Particulate matter (PM) emissions are controlled by a dry electrostatic precipitator (ESP) manufactured by Western Precipitator Division, Joy Manufacturing Corporation. The PM control efficiency is 99.7%. Unit No. 1 began commercial operation in 1970.

Unit No. 2 is a fossil fuel fired steam boiler electrical generating unit with a design capacity rating of 3,996 MMBtu/hour and a design electrical generating capacity of 445 MW. It is a wet bottom utility boiler manufactured by Riley Stoker Corporation. Nitrogen oxides (NO_x) emissions are controlled by low NO_x burners (LNB) and a selective catalytic reduction (SCR) system, which was installed in 2009. Particulate matter (PM) emissions are controlled

by a dry electrostatic precipitator (ESP) manufactured by Western Precipitator Division, Joy Manufacturing Corporation. The PM control efficiency is 99.7%. ~~Unit No. 2 is also equipped with a neural network system that monitors the following parameters: excess oxygen (O₂) bias; force draft fan balance bias; mill outlet temperature bias; rating damper bias; and, mill bypass damper bias.~~ Unit No. 2 began commercial operation in 1973.

- Section III, Subsection A, A.2 - Design Capacity, page 9 of 107. The term “modification” as defined in Chapter 62-210.200 F.A.C. should be used instead of “physical or operational changes.” A “modification” is 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... .” An air construction permit shall be obtained by the owner or operator of any modification of any emissions unit pursuant Chapter 62-210.300 (1)(a) F.A.C. In addition, the permitting note should clarify the acid rain CEMS shall not be used for compliance purposes. Please revise the condition to be consistent with the State statues as follows:

A.2 Design Capacity. The design heat input rates are as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>
1	4,037
2	3,996
3	4,115

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. Although the above design capacities are not intended as operational restrictions, the permittee shall obtain the appropriate air construction permits before making any modifications~~physical or operational changes~~ that would increase the actual heat input rate capabilities of a unit. [Rules 62-4.160(2), 62-210.200 (Definitions – Modification, Potential to Emit (PTE)), 62.210.300, 62-213.440 & 62-296.405(1), F.A.C.; and, Permit Nos. 0570039-014-AC (Unit Nos. 1 – 4 LNB installations) & 0570039-022-AC, Condition A.16 (Unit No. 3 SCR installation).]

{Permitting Note: For purposes of the Acid Rain program, the actual heat input rate of each of these units is reported based on the measured exhaust gas flow rate. According to the applicant, the Acid Rain CEMS at this site have historically predicted higher heat input rates than methods based on the mass flow and fuel properties of coal. The Acid Rain CEMS shall not be used for compliance purposes.}

- Section III, Subsection A, A.4 - Methods of Operation, A4 c.(3)(c) Fly ash, page 10 of 107. Fly ash should be reinjected from all four (4) units. The reference to “Unit 4” should be removed to state: “Reinjection of Fly Ash into Units 1, 2, 3, and 4 for energy recovery.”
- Section III, Subsection A, A.4 - Methods of Operation, A4 c.(1) Boiler Cleaning Waste, page 10 of 107. The facility was originally designed to evaporate up to 150,000 gallons per year. Unit No. 4 is a larger boiler that has a potential to generate up to 300,000 gallons per year.

Therefore, it is requested the condition be revised to evaporate up to 300,000 gallons per year as follows:

(1) Boiler Chemical Cleaning Waste. Evaporation of up to ~~300,000~~ 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially hazardous air pollutant (HAP)-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.

- Section III, Subsection A, A.8 - Selective Catalytic Reduction (SCR) System, page 12 of 107. The permitting note should be revised to correct the actual commercial startup of the SCR Units Nos. 1 to 3.

{Permitting Note: Selective catalytic reduction (SCR) systems commenced operation were installed under the following schedule:

Unit No. 3 - July 1, 2008~~started up on April 24, 2008~~, as authorized by Permit No. 0570039-022-AC;

Unit No. 2 - April 30, 2009, as authorized by Permit No. 0570039-024-AC; and,

Unit No. 1 - April 19, 2010~~to be installed in 2010~~, as authorized by Permit No. 0570039-024-AC.}

- Section III, Subsection A, A.53 - Determination of Heat Input, page 19 of 107. TEC requests measuring the power gross output on an average basis rather than on a 4-hour rolling basis. The arithmetic average is nearly identical to the 4-hour rolling average at base loads and is easier to calculate. In addition, industry standard practices are employed to collect and sample coal or coal blends. ASTM analytical methods and quality standards are utilized to test the coal samples. The condition should be revised to these changes as follows:

The heat input shall be calculated as the product of the gross heat rate (Btu/kWh) and gross power output (MW). The gross power output shall be measured on an arithmetic average during the compliance demonstration test~~on a 4-hour rolling average~~. The gross unit heat rate will use a 3-month rolling "seasonal" average based on calculated monthly heat rates. These rates shall be determined by the tons of coal bunkered, composite coal analyses and gross power output for the month. The composite fuel samples shall be collected by on-site personnel in accordance with industry standard practices, ASTM standards~~. ASTM standards~~. [Rule 62-213.440, F.A.C.]

- Section III, Subsection B, B.2 - Design Capacity, page 22 of 107. The term "modification" as defined in Chapter 62-210.200 F.A.C. should be used instead of "physical or operational changes." A "modification" is 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... ." An air construction permit shall be obtained by the owner or operator of any modification of any emissions unit pursuant Chapter 62-210.300 (1)(a) F.A.C. In addition, the permitting note should clarify that the acid rain CEMS shall not be used for compliance purposes. Please revise the condition to be consistent with the State statues as follows:

B.2 Design Capacity. The design heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>
4	4,330

This design heat input rate is based on the original design of the unit for firing coal with a certain lower heating value (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. Although the above design capacity is not intended as an operational restriction, the permittee shall obtain the appropriate air construction permits before making any modifications~~physical or operational changes~~ that would increase the actual heat input rate capability of the unit. [Rules 62-4.160(2), 62-210.200 (Definitions – Modification, Potential to Emit (PTE)); and, 62-296.405(1), 62.210.300 & 62-213.440, F.A.C.; and, Permit Nos. 0570039-014-AC (Unit Nos. 1 - 4) & 0570039-053-AC)

{Permitting Note: For purposes of the Acid Rain program, the actual heat input rate of each of the unit is reported based on the measured exhaust gas flow rate. According to the applicant the Acid Rain CEMS at this site have historically predicted higher heat input rates than methods based on the mass flow and fuel properties of coal. The Acid Rain CEMS shall not be used for compliance purposes.}

- Section III, Subsection B, B.4 - Methods of Operation, B.4a Fuels Normal Operation, page 23 of 107. The condition should be revised as follows:
 - a. *Fuels - Normal Operation.* The only fuels allowed to be burned in Unit 4 ~~Unit Nos. 1, 2 and 3~~ shall consist of coal, or a coal/petroleum coke blend, or coal blended with raw coal residual, or a coal/petroleum coke blend further blended with raw coal residual. In any case, the petroleum coke content of any fuel blend shall not exceed 20% by weight.
- Section III, Subsection B, B.4 - Methods of Operation, B4 c.(1) Boiler Cleaning Waste, page 24 of 107. The facility was originally designed to evaporate up to 150,000 gallons per year. Unit No. 4 is a larger boiler that has a potential to generate up to 300,000 gallons per year. Therefore, it is requested the condition be revised to evaporate up to 300,000 gallons per year as follows:
 - (1) Boiler Chemical Cleaning Waste. Evaporation of up to ~~150,000~~ 300,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially hazardous air pollutant (HAP)-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.
- Section III, Subsection B, B.4 - Methods of Operation, B.4c.(3)(c) Fly ash, page 24 of 107. Fly ash should be reinjected from all four (4) units. The reference to “Unit 4” should be removed to state: “Reinjection of Fly Ash into Units 1, 2, 3, and 4 for energy recovery.”

- Section III, Subsection B, B.11 - Selective Catalytic Reduction (SCR) System, page 25 of 107. The permitting note should be revised as follows to reflect actual commercial startup of the SCR Unit No. 4.

{Permitting Note: A selective catalytic reduction (SCR) system commenced operation ~~has been installed~~ under the following schedule:

Unit No. 4 – ~~May 26, 2007 started in 2007~~, as authorized by Permit No. 0570039-020-AC (amended by 0570039-026, -031 & -036-AC).}

- Section III, Subsection B, B.53 - Determination of Heat Input, page 31 of 107. TEC requests measuring the power gross output on an average basis rather than on a 4-hour rolling basis. The arithmetic average is nearly identical to the 4-hour rolling average at base loads and is easier to calculate. In addition, industry standard practices are employed to collect and sample coal or coal blends. ASTM analytical methods and quality standards are utilized to test the coal samples. The condition should be revised to these changes as follows:

The heat input shall be calculated as the product of the gross heat rate (Btu/kWh) and gross power output (MW). The gross power output shall be measured on an arithmetic average during the compliance demonstration test. ~~on a 4-hour rolling average.~~ The gross unit heat rate will use a 3-month rolling "seasonal" average based on calculated monthly heat rates. These rates shall be determined by the tons of coal bunkered, composite coal analyses and gross power output for the month. The composite fuel samples shall be collected by on-site personnel in accordance with industry standard practices, ASTM standards. [Rule 62-213.440, F.A.C.]

- Section III, Subsection F, F.6 - Operating Procedures, page 40 of 107. Enclosures and baghouses for these emissions units shall be properly operated and maintained at all times in a condition to minimize particulate matter emissions. All operators of air pollution control devices shall be properly trained in plant specific equipment. ~~The owner and operator shall ensure that all facility staff responsible for these emissions units are trained in their operation and maintenance in accordance with the guidelines and procedures as established by the equipment manufacturers.~~ [Rule 62-4.070(3), F.A.C.]
- Section III, Subsection L, L.2 - Operating Procedures, page 55 of 107. The baghouse for this emissions unit shall be properly operated and maintained at all times in a condition to minimize particulate matter emissions. All operators of air pollution control devices shall be properly trained in plant specific equipment. ~~The owner and operator shall ensure that all facility staff responsible for these emissions units are trained in their operation and maintenance in accordance with the guidelines and procedures as established by the equipment manufacturers.~~ [Rule 62-4.070(3), F.A.C.]
- Section III, Subsection L, L.13 - Records, page 56 of 107. All operators of air pollution control devices shall be properly trained in plant specific equipment. ~~Tampa Electric shall keep records of facility staff training, and shall maintain, on site, an Operations and~~

~~Maintenance Plan for the baghouse that details how it shall be properly operated and maintained at all times.~~ Tampa Electric shall also take quarterly pressure readings from the baghouse pressure-sensing device. [Rule 62-213.440(1)(b)1.b. (Periodic Monitoring), F.A.C.]

- Section III, Subsection L, L.3 - Particulate Matter (PM) and Visible Emissions. This condition or other similar condition should state the 2.1 lb/ hr and 0.99 tons/year PM requirements consistent with Table 1 – Summary of Air Pollutant Standards and Terms.
- Section III, Subsection O, O.8 Nitrogen Oxide (NO_x), page 64 of 107. The RATA is based 9-21 minutes tests not a 3 run average.
 - d. *Demonstration of Compliance.* Continuous compliance shall be demonstrated with the concentration-based (ppmvd) NO_x emissions limits (4-hour rolling average) for each fuel type by data collected from the required continuous emissions monitoring system (CEMS). Compliance with the mass-based (lb/hour) NO_x emissions limits (~~3-run average~~) shall be demonstrated by data collected during the required annual Relative Accuracy Test Audit (RATA). When firing ULSD, compliance with the SIP limit ensures compliance with the NSPS limit of 74 ppmvd @ 15% O₂.
- Section III, Subsection O, O.9 Carbon Monoxide (CO), page 64 of 107. The RATA is based 9-21 minutes tests not a 3 run average.
 - c. *Demonstration of Compliance.* Continuous compliance shall be demonstrated with the concentration-based (ppmvd) CO emissions limits (3-hour rolling average) for each fuel type by data collected from the required continuous emissions monitoring system (CEMS). Compliance with the mass-based (lb/hour) CO emissions limits (~~3-run average~~) shall be demonstrated by data collected during the required annual Relative Accuracy Test Audit (RATA).
- Section III, Subsection O, O.32 - Reporting Schedule. The referenced conditions in the section O.32 should be revised to reference the correction conditions. Also, TEC requests the notification requirement for tuning be removed to be consistent with Bayside Power Station Permit 0570040-029-AV.

O.32 Reporting Schedule.

Report	Reporting Deadline	Related Conditions
CEMS RATA Reports	15 days prior to RATA	O.34O.38.
Excess Emissions Reporting	Various	O.35O.39.
Notification of Tuning	One day prior to tuning	O.36O.40.

- Section III, Subsection O, O.36 - Notification of Tuning. As previously mentioned, TEC requests the notification requirement for tuning be deleted as follows:

~~**O.36 Notification of Tuning.** If emissions in excess of a standard could reasonably be expected to occur due to a planned tuning activity, the permittee shall notify the Compliance Authority at least one working day prior to the expected activity of the nature, extent, and duration of the planned tuning activity. In addition, the Department may request a written summary report of the extent and duration of the resulting excess emissions. [Rule 62-213.440, F.A.C.]~~

The deletion is requested to allow the flexibility to perform tune-ups required by the manufacturer or facility operations to maintain performance of the combustion turbine. There have been circumstances where the 24-hour notice was not possible and enforcement discretion could not be obtained in a reasonable manner. Furthermore, the removal of this requirement is consistent with the Bayside Title V air permit No. 0570040-029-AV and proposed draft permit for the Polk Power Station 1050233-028-AV.

- A provision to exempt VE testing based on the number of operating hours is requested. Permit Condition J.13 states annual VE testing is not required for units operating less than 400 hours per year [See Specific Condition TR7, Rule 62-297.310(7)(a)4., F.A.C.]. TEC believes the exemption is applicable to all emission units with an annual VE requirement pursuant to Condition J.13 and TR7. The requested revisions to Condition TR7 are shown below.

VE Testing Not Required. By this permit, annual emissions compliance testing for VE is not required for emissions units operating less than 400 hours per year [Condition J.13; Rule 62-297.310(7)(a)4., F.A.C.].

- Appendix 1 page I-2 of 2. Please correct the errors in the table as follows:

Location	Installation Date	PM tons/yr	PM ₁₀ tons/yr	Drift Rate%	Flow (gpm)
Unit 1	1970	0.28	0.17	0.0040.001	6,000
Unit 2	1973	0.28	0.17	0.0040.001	6,000
Unit 2 (upgraded)	1973/2011	1.4 (decrease)	0.86 (decrease)	0.005	6,000
Unit 3	1976	0.31	0.19	0.0040.001	6,500
Unit 4	1985	2.4	1.4	0.008	6,500
FGD	1985	0.047	0.00660.029	<u>0.005</u>	6,500 <u>250</u>

Table 1, Summary of Air Pollutant Standards and Terms.

- Please delete EU-007, Combustion Turbine No.1. This unit was removed from service on 10/26/2010.
- The fonts appear inconsistent throughout Table 1. Please revise the font to match the Table 2, Summary of Compliance Requirements.

Table 2, Summary of Compliance Requirements:

- Under E.U. ID No. -030 VE, please correct the permit condition as follows: ~~III.P.8. 11 & 13III.P.8. - 12.~~

General Permit Comments

- The Big Bend nominal rated capacity is “1,892 MW” not “2,028 MW” as shown below. Please correct the technical evaluation (Facility Description and Location, page 2 of 5) and Title V air permit (Section 1, page 2 of 107) accordingly.

Unit No.	Unit Type	Fuel	Nominal Capacity (kW)
Unit 1	Steam	Bituminous Coal	445,500
Unit 2	Steam	Bituminous Coal	445,500
Unit 3	Steam	Bituminous Coal	445,500
Unit 4	Steam	Bituminous Coal	486,000
SCCT 4A/B	Gas turbine	Gas/Oil	69,985
Total Nominal Rate Capacity (kW)			1,892,485

- The simple cycle combustion turbines (EU-041 and -042) should be referenced as “SCCT” not “CT” in order to be consistent with the Title V permit. Please correct technical evaluation (Facility Description and Location, page 2 of 5), air construction permit (Facility Description, page 2 of 11), Title V air permit (Facility Description, page 2 of 107; Section O.3b, page 62 of 107; Section O.30, page 68 of 107; Section O.38, page 70 of 107) and Statement of Basis (10. Section III O.3b, page 13 of 19).
- The electrical requirements should be distinguished from the mechanical power requirements. The power requirement of the black start diesel engine should be referenced as “1,000 ekW” not “1,000 kW.” Please correct the Statement of Basis (page 11 of 19), Title V air permit (Section I, Subsection B, page 3 of 107; Section III N, page 59 of 107).

Letter of Authorization 0570039-051-AC

- ~~Determination, page 2 of 3.~~ The letter of authorization requires the Title V air operation permit shall be updated at the next opportunity to incorporate the proposed changes in the description of the authorized emergency limestone handling equipment and methods of operation.

TEC is submitting additional revisions to the above referenced permits in accordance with the public commenting period. These permit revisions are not considered substantial changes that would warrant another public notice. TEC believes the revisions provide reasonable assurance of complying with the provisions of Chapter 62-4 F.A.C.

Mr. Jeffery F. Koerner
August 3, 2012
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Please review the above revisions and contact me at (813) 228-4232 or Byron Burrows at (813) 228-1282, if you have any questions

Sincerely,



Robert A. Velasco, P.E., BCEE, QEP
Air Programs
Environmental, Health & Safety

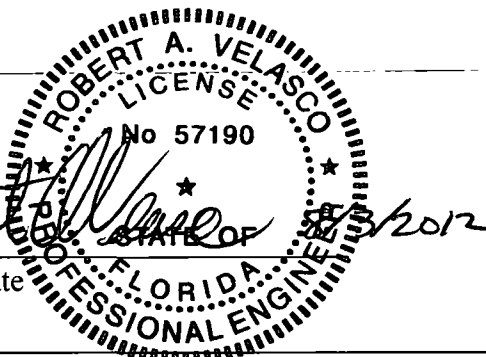
EHS/iym/RAV159 Additional Revisions to Permits Nos 53 & 54

cc: Robert Wong, FDEP
Diana Lee, EPCHC

**Tampa Electric Company
Big Bend Power Station
Facility ID No. 0570039
Additional Comments to Draft Permits
No. 0570039-053-AC/0570039-054-AV**

Professional Engineer Certification

1. Professional Engineer Name: Robert A. Velasco, P.E. Registration Number: 57190
2. Professional Engineer Address... Organization/Firm: Tampa Electric Company Street Address: P.O. Box 111 City: Tampa State: FL Zip Code: 33601
3. Professional Engineer Telephone Numbers... Telephone: (813) 228 - 4232 Fax: (813) 228 - 1308
4. Professional Engineer E-mail Address: ravelasco@tecoenergy.com
5. Professional Engineer Statement: <i>(1) Engineering opinions and information included herein provides reasonable assurance of meeting the requirements of Chapter 62-210.300 F.A.C.;</i> <i>(2) Engineering information included herein is believed to be correct to the best of the Engineer's knowledge;</i> <i>(3) Seal does not certify or attest to the accuracy of work or information prepared by others who are qualified to perform such services. This includes, but not limited to drawings, specifications, vendor information, engineering test data, laboratory data, correspondences, personnel communication.; and</i> <i>(4) The Engineer is not responsible for subsequent modifications made by others without the Engineer's written consent.</i>



Signature/Date
(seal)