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**REVISED STATEMENT OF BASIS**

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**Title V Air Operation Permit Revision  
Permit No. 0570040-033-AV  
(Revises Permit No. 0570040-027-AV)**

**APPLICANT**

The applicant for this project is Tampa Electric Company. The applicant's responsible official and mailing address are: Frank Busot, Director, Bayside Power Station, Tampa Electric Company, P.O. Box 111, Tampa, Florida 33601-0111.

**FACILITY DESCRIPTION**

The applicant operates the H.L. Culbreath Bayside Power Station, which is located at 3602 Port Sutton Road, Tampa, Florida, 33619. The existing facility is an electric power plant categorized as Standard Industrial Classification No. 4911. The existing plant consists of the following emissions units.

- Unit 1 (EU 020 – 022) is a “3-on-1” combined cycle combustion turbine system consisting of three General Electric Model PG7241(FA) combustion turbines (169 megawatt (MW) each) and one common steam-electrical generator (239 MW) with a combined nominal generating capacity of 746 MW. Unit 2 (EU 023 – 026) is a “4-on-1” combined cycle combustion turbine system consisting of four General Electric Model PG7241(FA) combustion turbines (169 MW each) and one common steam-electrical generator (414 MW) with a combined nominal generating capacity of 1090 MW.

Each combustion turbine set includes an automated gas turbine control system, an inlet air filtration system, an evaporative inlet air cooling system, an unfired heat recovery steam generator (HRSG), a single exhaust stack, electric fuel heaters, cooling towers and associated support equipment. Each combustion turbine fires natural gas and is equipped with dry low-NO<sub>x</sub> (DLN) combustion technology and a selective catalytic reduction (SCR) system to reduce nitrogen oxides (NO<sub>x</sub>) emissions. Emissions of CO and NO<sub>x</sub> are monitored with continuous emissions monitoring systems (CEMS).

- Units 3 through 6 (EU 031 - 038) consist of four Pratt & Whitney Model No. FT8-3 SwiftPac® aero-derivative combustion turbine-electrical generator sets to operate in simple cycle mode. For each SwiftPac®, two combustion turbines are coupled to one common electrical generator set having a total nominal gross generation capacity of 62 MW. Each unit fires natural gas, controls NO<sub>x</sub> emissions with water injection and carbon monoxide (CO) emissions with catalytic oxidation. Emissions of CO and NO<sub>x</sub> are monitored with continuous emissions monitoring systems (CEMS).
- Fuel yard activities (EU 008).
- Diesel engines used to power generators and a fire pump (EU-039).

Also included in this permit are miscellaneous unregulated and insignificant activities.

**PRIMARY REGULATORY REQUIREMENTS**

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title IV: The combustion turbines (EU-020 - EU-026 and EU-031 - EU-038) are subject to Phase II of the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: The facility operates units subject to applicable provisions in the following New Source Performance Standards (NSPS) in Part 60 of Title 40, Code of Federal Regulations (CFR):

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- Subpart A, General Provisions (EU-020 - EU-026 and EU-039);
- Subpart GG, Stationary Gas Turbines (EU-020 - EU-026);
- Subpart IIII, Stationary Compression Ignition Internal Combustion Engines (EU-039); and
- NSPS Subpart KKKK, Combustion Turbines (EU-031 - EU-038).

NESHAP: The facility operates units subject to applicable provisions in the following National Emissions Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63:

- Subpart A, General Provisions (EU-039); and
- Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines (EU-039).

CAIR: The combustion turbines (EU-020 - EU-026 and EU-031 - EU-038) are subject to the applicable requirements of the Clean Air Interstate Rule (CAIR) in accordance with Rule 62-296.470, F.A.C.

CAM: Each combined cycle combustion turbine (EU-020 - EU-026) is equipped with an SCR system to control NO<sub>x</sub> emissions; however, compliance is continuously demonstrated by CEMS. Each simple cycle combustion turbine (EU-031 - EU-038) is equipped with an SCR system to control NO<sub>x</sub> emissions; however, compliance is continuously demonstrated by CEMS. There are no other add on control equipment. Therefore, a Compliance Assurance Monitoring (CAM) Plan is not required for any of the emissions units.

### **PROJECT DESCRIPTION**

The purpose of this Permitting project is to revise for the second time Title V air operation Permit No. 0570040-027-AV to incorporate new revised specific conditions. The project also incorporates concurrent air construction permit revision No. 0570040-032-AC (PSD-FL-301E), which revises Permit No. 0570040-019-AC (PSD-FL-301C) and 0570040-028-AC (PSD-FL-301 D) for the combined cycle units (EU-020 - 026); Permit No. 0570040-026-AC and 0570040-028-AC for the simple cycle units (EU-031 – EU-038); and, 0570040-006-AC for the fuel yard (EU-039). The changes for the combustion turbines are primarily related to permitted capacity, allowable fuels, startup, shutdown, malfunctions and low load operations, authorized excess emissions reporting requirements and continuous emissions monitoring requirements. The changes to the engines are related to engine replacements and the changes to the fuel yard are related to obsolete coal transportation conditions. This project removes all references to the Consent Decree between EPA and TEC.

### **PROCESSING SCHEDULE AND RELATED DOCUMENTS**

- 1/04/13 Received revised application for a concurrent air construction permit revision and Title V permit. Application complete.
- 2/05/13, 3/14/13 and 3/15/13 Received additional information by e-mail.

### **PROJECT REVIEW**

The following permit conditions are revised as indicated. Strikethrough is used to denote the deletion of text. Double-underlines are used to denote the addition of text.

#### **Subsection A. Combined Cycle Combustion Turbines (E.U. 020 - 026)**

##### Essential Potential to Emit (PTE) Parameters

**A.1. Permitted Design Capacity.** ~~The maximum heat input rate to each gas turbine shall not exceed 1842 MMBtu per hour while producing approximately 169 MW (shaft).~~ The maximum design heat input rate of 1842 MMBtu per hour is based on operation at 100% load, a compressor inlet air temperature of 59° F, the higher heating value (HHV) of natural gas and expected performance levels. Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, and evaporative cooling. The permittee shall maintain on site records of the manufacturer's performance curves for the gas turbines. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or

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equations on file with the Department. [Permit No. PSD-FL-301A (0570040-015-AC) and PSD-FL-301D (0570040-032-AC); Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.]

{Permitting Note: The heat rate is used as a guide to demonstrate operation at the maximum heat input rate during the RATA annual compliance testing. The measured heat input shall be limited to within 10% of the true value to account for variances in equipment, instrumentation or calculation variables.}

### A.3 Methods of Operation.

- a. *Allowable Fuels.* Each gas turbine shall fire only pipeline-quality natural gas. The fuel sulfur content shall not exceed 2 grains per 100 SCF of natural gas based on a 12-month rolling average. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Compliance shall be demonstrated each month by compiling the daily fuel sulfur analyses provided by the pipeline vendor. Methods for determining the sulfur content of the natural gas shall be in accordance with applicable 40 CFR Part 75 procedures, as amended or ASTM methods D4084-82, D3246-81 or equivalent methods. No other fuels are allowed. [Permit No. PSD-FL-301A (0570040-015-AC) and PSD-FL-301D (0570040-032-AC); Rules 62-210.200(PTE) and 62-213.410, F.A.C.; DEP/TEC Consent Final Judgment; EPA/TEC Consent Decree]

**A.10 Alternative Standards and CEMS Data Exclusion:** As provided by the authority in Rule 62-210.700(5), F.A.C., the above requirements are established in lieu of the provisions of Rule 62-210.700(1), F.A.C. The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, malfunction and other limited-use operations. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such incidents.

No change to a. through d. (1) – (3) no change.

(4) *Other Limited-Use Operations:* CEMS data collected during any of the following limited use operational periods may be excluded from the compliance averages.

- (a) *DLN Tuning.* “DLN Tuning” means operating the gas turbine at intermittent loads throughout the full load range in order to adjust and tune the dry low-NO<sub>x</sub> (DLN) combustion system. DLN tuning shall be conducted in accordance with manufacturer’s recommendations (or industry standards). {Permitting Note: For example, a major tuning session would occur after combustor change-out.}

(b) *Other Tuning:* “Other tuning” shall mean any on-line adjustments necessary following maintenance work to allow the units to operate to manufacturers’ recommendations or industry standards or modifying the water-to-fuel ratio to affect a change in the post combustion air emissions. Excess CEMS emissions data collected during tuning may be excluded from the compliance averages.

No change to the rest of this condition language; except for the update of paragraphs numbers (b), (c) and (d).

**A.11 Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly the semiannual report, if requested by the Department. [Permit PSD-FL-301D (0570040-032-AC); Rule 62-210.700(6), F.A.C. and 40 CFR 60.7 (c)]

### Continuous Monitoring Requirements

**A.14. Continuous Emissions Monitoring Systems:** The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) in the exhaust stack of each emissions unit to measure and

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record emissions of CO and NO<sub>x</sub> in a manner sufficient to demonstrate compliance with the CEMS emission standards of this permit. The carbon dioxide (CO<sub>2</sub>) content of the flue gas shall also be monitored at the location where CO and NO<sub>x</sub> are monitored to correct the measured emissions rates to 15% oxygen. The oxygen content of the flue gas shall be calculated by the CEMS using the CO<sub>2</sub> content of the flue gas and an F-factor that is appropriate for natural gas.

No change *a.* through *c.*

- d.* ***NO<sub>x</sub> and CO<sub>2</sub> Certification.*** The NO<sub>x</sub> and CO<sub>2</sub> monitor shall be certified pursuant to 40 CFR Part 75 and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the CEMS emission standards of this permit, missing data shall not be substituted. Instead the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The relative accuracy test assessments (RATA) required for the NO<sub>x</sub> monitor shall be performed using EPA Method 7E or 20 as defined in Appendix A of 40 CFR 60. The span for the NO<sub>x</sub> monitor shall not be greater than 10 ppmvd corrected to 15% oxygen. A dual span monitor may be used. ***The RATA required for the CO<sub>2</sub> monitor shall be performed using EPA Method 3A, of Appendix A in 40 CFR 60.***
- e.* ***CO and CO<sub>2</sub> Certification.*** ~~The CO<sub>2</sub> monitor shall meet Performance Specification 3 in Appendix B of 40 CFR 60.~~ The CO monitor shall be certified pursuant to Performance Specification 4 in Appendix B of 40 CFR 60. Quality assurance procedures for ***each this*** monitor shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter and reported semi-annually to the Compliance Authority. ***The RATA required for the CO<sub>2</sub> monitor shall be performed using EPA Method 3A, of Appendix A in 40 CFR 60.*** The RATA required for the CO monitor shall be performed using EPA Method 10, of Appendix A in 40 CFR 60. The Method 10 analysis shall use a continuous sampling train. The span for the CO monitor shall not be greater than 25 ppmvd corrected to 15% oxygen. A dual span CO monitor may be used.
- f.* ***Monitor Availability.*** Monitor availability shall not be less than 95% in any calendar quarter. ***The quarterly Data Assessment Report required in Condition 23.e above shall be used to demonstrate monitor availability and shall be reported with the Semiannual CEMS Report.*** In the event 95% availability is not achieved, the permittee shall provide the Compliance Authority with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit. The quarterly reports shall be submitted semiannually in conjunction with the Semiannual CEMS Report in Condition A.20. .

No change to the rest of this condition.

[Permit No. ***PSD-FL-301C (0570040-019-AC) and PSD-FL-301D (0570040-028-AC)***; Rules 62-4.070(3), 62-210.700(5), and 62-212.400(BACT), F.A.C.]

### **Recordkeeping and Reporting Requirements**

**A.20. Semiannual CEMS Report:** In addition to the reports required pursuant to 40 CFR 60.7, the permittee shall submit semiannual reports for each gas turbine summarizing the CEMS data and equipment. For each calendar quarter, the report shall include: the 24-hour block compliance averages for each day of operation; the number of 1-hour emission averages excluded from each 24-hour compliance average; the emissions rate of the excluded monitoring data; the reason for excluding monitoring data; the hours of missing data due to monitor downtime; the reason for any monitor downtime; ***unusual maintenance or repair of the CEMS;*** and a summary of any RATA tests performed. ***Based on operational data, the permittee shall also update the general range of ammonia flow rates required to meet NO<sub>x</sub> emissions limitations over the range of gas turbine load conditions.*** A report covering operations from January

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through June shall be submitted by July 30<sup>th</sup> of each year. A report covering operations from July through December shall be submitted by January 30<sup>th</sup> of each year. The data assessment report required by Condition A.14(f) shall be submitted in conjunction with the Semiannual CEMS Report. The report due dates may be modified by the Title V permit. [Permit No. PSD-FL-301A (0570040-015-AC) and (0570040-032-AC); Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

**A.21. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Data Assessment Report for Quality Assurance for <del>each the CO and CO<sub>2</sub></del> Monitor	Done each calendar quarter and reported semi-annually to the Compliance Authority	A.14.e.
Corrective Action Report for Monitor Availability for each CO, CO <sub>2</sub> and NO <sub>x</sub> Monitor	If monitor availability is less than 95% in any calendar quarter, provide report to Compliance Authority identifying the problems and a plan of corrective actions.	A.14.
Semiannual CEMS Report for each CO and NO <sub>x</sub> Monitor	July 30 <sup>th</sup> (for January through June), and January 30 <sup>th</sup> (July through December)	A.20.

{Permitting Note: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.}

**Subsection B. Fuel Yard (E.U. 008)**

The specific conditions in this subsection apply to the following emissions unit.

EU No.	Brief Description
008	Fuel Yard

Activities related to the existing fuel yard include: ~~barge unloading of coal (clamshell and continuous); railcar unloading of coal; truck, barge, and train unloading of flux; and the transfer and storage of these materials from barge or truck using mobile equipment.~~ The following table identifies the emissions points and particulate matter control equipment information.

Table B-1. Emission Point Summary for Fuel Yard

Emission Point Description	ID No.	Throughput TPH	Control Method	Efficiency
<del>Barge to clamshell</del>	<del>FH 001/002</del>	<del>2,300</del>	<del>DS</del>	<del>95%</del>
<del>Barge to continuous unloader</del>	<del>FH 003</del>	<del>2,300</del>	<del>DS</del>	<del>95%</del>
<del>Clamshell to barge unloading hopper</del>	<del>FH 004/005</del>	<del>2,300</del>	<del>DS</del>	<del>95%</del>
<del>Continuous unloader to conveyor A</del>	<del>FH 006</del>	<del>2,300</del>	<del>**DS</del>	<del>95%</del>
<del>Barge unloading hoppers to conveyor B</del>	<del>FH 008/009</del>	<del>2,300</del>	<del>**DS/E</del>	<del>95%</del>
<del>Railcar to rail unloading hopper</del>	<del>FH 013</del>	<del>2,300</del>	<del>DS/E</del>	<del>95%</del>
<del>Rail unloading hopper to conveyor I</del>	<del>FH 014</del>	<del>2,300</del>	<del>**DS/E</del>	<del>95%</del>

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Emission Point Description	ID No.	Throughput TPH	Control Method	Efficiency
Fuel storage pile	FH-022/023 a & b	NA	MWS <del>DS</del>	50%
Dozer operations of storage piles	FH-044	NA	MWS <del>DS</del>	50%
Truck unloading - auxiliary	AH-001	400	MWS <del>DS</del>	85%
Storage pile	AH-002	400	MWS <del>DS/E</del>	90%
Truck dump to flux storage pile	OMH-001	NA	MWS <del>DS</del>	85%
Flux storage pile maintenance	OMH-002	NA	MWS <del>DS</del>	50%
Flux storage pile	OMH-003	NA	MWS <del>DS</del>	50%

Notes: "MWS" means manual water suppression. "DS" means dust suppressant. "E" means enclosure. "NA" means not applicable. The double asterisk (\*\*) identifies the dust suppressant application point.

**Monitoring of Operations**

B.3 Control Techniques: Manual water suppression shall be applied to the emission control points specified in Table B-1 to control fugitives emissions and maintain the opacity of less than or equal of 5%. Water sprays or chemical wetting agents and stabilizers are acceptable methods to be used on coal storage piles as necessary to maintain an opacity of less than or equal to 5%. Other appropriate methods may be applied to maintain this opacity, after they are approved by the Department. Facilities that cause frequent, valid complaints may be required by the Compliance Authority to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular source, the Compliance Authority shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice. [Permit Nos. 0570040-006-AC and 0570040-010-AC]

B.4. Application of Dust Suppressants: Dust suppressants shall be applied to the fuel either prior to or at the time of delivery and at all emission points as specified in Table B-1 of this subsection to control fugitive particulate matter emissions and maintain an opacity of less than or equal to 5%. For the application of dust suppressants prior to delivery, the permittee shall keep monthly records of: 1) the amount of dust suppressant applied for each type and amount of coal delivered, and 2) the type of dust suppressant used (e.g., MSD sheets, product name). [Permit No. 0570040-006-AC] Reserved.

B.6 Proper Maintenance: All controls associated with the transfer points shall be maintained to the extent that the capture efficiencies credited will be achieved. [Rule 62-4.070(3), F.A.C. and Permit No. No. 0570040-006-AC AO29-216480]

B.7 Operation and Maintenance Plan for Particulate Matter Control

a. Process Parameters

(1) Operation Schedule: 8760 hours per year

(2) Equipment Data

Conveyor Hoods: Corrugated Aluminum

Transfer Point Enclosures: Carbon Steel

b. Inspection and Maintenance Procedures: If operating, the fuel yard particulate matter control equipment shall receive regular preventative maintenance as follows:

(1) Conveyor Enclosures

(a) Daily random visual inspections of conveyor hoods.

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~~(b) Daily random visual inspection of the transfer points chute work.~~

~~(2) Dust Suppression System~~

~~(a) Quarterly inspection of system for water leaks.~~

~~(b) Quarterly inspection of spray nozzles.~~

~~The pumps, tanks, etc., that make up the dust suppression system undergo normal maintenance including lubrication, flushing, and draining.~~

[Rule 62-296.700, F.A.C., and Permit 0570040-032-AC]

B.8. Visible Emissions: A 30-minute visible emissions test shall be performed on ~~the following material~~ transfer operations during each federal fiscal year (October 1 - September 30) the fuel yard is operational:

~~a. The clamshell to the hopper; and~~

~~b. The railcar to the hopper.~~

The test method for visible emissions shall be determined using EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-297.310(4)(a)2, 62-297.310(7)(a)4, F.A.C.; Permits No. 0570040-006-AC and 0570040-032-AC]

**Subsection C. Engines (E.U.039)**

This section of the permit addresses the following emissions unit.

<u>EU No.</u>	<u>Brief Description</u>
<u>039</u>	<u>Four Diesel Emergency Engines</u>

The specific conditions in this subsection apply to the following emissions unit.

Engine	Qty.	In-Service Date	Engine Displacement	Engine Model Year	Rating	Rule Applicability
<del>Standby Diesel Generator</del>	<del>1</del>	<del>02/1980</del>	<del>638 cu. in. (10.5 litre)</del>	<del>1979</del>	<del>227 bHP</del>	<del>NESHAP Subparts A, ZZZZ</del>
Diesel Emergency Generator (replacement)	1	08/2012	548 cu. in. (9 litre)	2012	385 bHP	NSPS Subparts A, III NESHAP Subpart A, ZZZZ
Diesel Emergency Fire Pump Engine	1	02/2007	358 cu. in. (5.9 litre)	2006	188 bHP	NSPS Subparts A, III NESHAP Subpart A, ZZZZ
Diesel Emergency Backup Generator	1	09/2008	912 cu. in. (14.9 litre)	2007	755 bHP	
Diesel <del>Emergency</del> Black Start Generator <u>Engine</u>	1	04/2009	1943 cu. in. (31.8 litre)	2007	1495 bHP	

**National Emission Standards for Hazardous Air Pollutants**

C.1. NESHAP Subpart A: As identified in the above table, ~~five of~~ the engines are subject to applicable requirements in Subpart A (General Provisions) of 40 CFR 63. See Appendix NE.

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C.2. NESHAP Subpart ZZZZ: As Identified in the above table, five of the engines are subject to applicable requirements in Subpart ZZZZ (Reciprocating Internal Combustion Engines) of 40 CFR 63. See Appendix ZZZZ.

- a. The Standby Diesel Generator (227 bHP) is an existing unit as defined by NESHAP Subpart ZZZZ; however, there are no unit specific applicable requirements at this time.
- b. The other engines are defined as new units by NESAHP Subpart ZZZZ. Pursuant to 40 CFR63.6590, these units comply with NESHAP Subpart ZZZZ by complying with NSPS Subpart IIII.  
See Appendix ZZZZ.

[Permit 0570040-032-AC]

**Subsection D. Simple Cycle Combustion Turbines (E.U 031-038)**

**Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**D.8. Emission Standards:** Emissions from each simple cycle combustion turbine shall not exceed the following standards.

<b>Pollutant</b>	<b>Emission Standard e</b>	<b>Averaging Time</b>	<b>Compliance Method</b>	<b>Basis</b>
NO <sub>x</sub> <sup>a</sup>	25.0 ppmvd @ 15% oxygen	4-hour rolling avg.f	CEMS	NSPS Subpart KKKK
	32.0 lb/hour 56.0 tons/year	Average of three, 1-hour runs	Annual RATA	Rule 62-4.070(3), F.A.C.
CO <sup>b</sup>	21.0 ppmvd @ 15% oxygen	3-hour rolling avg.	CEMS	Rule 62-212.400(12), F.A.C. Source Obligation

No change to the rest of this condition.

**D.10. Excess CO Emissions Allowed - SIP:** If excess CO emissions occur due to startup, shutdown, malfunction, or tuning or black start testing, CEMS data collected during such periods may be excluded from the compliance averages in accordance with the following requirements provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. All periods of excluded data shall be consecutive for each such episode and only data obtained during the described episodes (startup, shutdown, malfunction and tuning) may be excluded in accordance with the procedures described in the CEMS Data Requirements of Appendix CM of this permit.

- a. Startup: No more than the first 10 15 minutes of CEMS data indicating exceedances of emission limits collected during startup shall be excluded for each simple cycle combustion turbine. For startups of less than 10 15 minutes in duration, only those minutes of exceedances attributable to startup shall be excluded. The total duration of a startup event is not limited.
- b. Shutdown: No more than the first 10-15 minutes of CEMS data indicating exceedances of emission limits collected during shutdown shall be excluded for each simple cycle combustion turbine. For shutdowns less than 10 15 minutes in duration, only those minutes of exceedances attributable to shutdown shall be excluded. The total duration of a startup event is not limited.
- c. Malfunction: No more than 120 minutes of CEMS data in a 24-hour period shall be excluded due

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to malfunctions of each gas turbine or control system. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data.

- d. *Tuning*: “Tuning” means any on-line adjustments necessary following maintenance work, adjusting the combustors in accordance with the manufacturer’s recommendations (or industry standards) or modifying the water-to-fuel ratio to affect a change in the post-combustion air emissions. Such tuning sessions are infrequent. Excess CEMS emissions data collected during tuning may be excluded from the compliance averages.
- e. Simulated Facility Black Start Testing and Facility Black Star Events: Up to 8 hours of CEMS data indicating exceedances of emissions limits may be excluded from the compliance demonstration periods for the gas turbines when operating less than full load for extended periods in relation to simulated or actual facility black start conditions.

As provided by the authority in Rule 62-210.700(5), F.A.C., the above conditions replace the provisions in Rule 62-210.700(1), F.A.C. All valid emissions data (including data collected during startup, shutdown, malfunction, and tuning, and black start testing ) shall be used to report annual emissions for the Annual Operating Report. The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report annual emissions for the Annual Operating Report. [Permit 0570040-032-AC; Rules 62-4.070(3), 62-210.200, 62-210.370(3) and 62-210.700(4), F.A.C.]

**Continuous Monitoring Requirements**

**D.14. CEMS for Continuous Compliance:** In accordance with the requirements in Appendix CM (Standard Continuous Monitoring Requirements) of this permit, the permittee shall calibrate, operate and maintain a CEMS to measure and record the emissions of CO and NO<sub>x</sub> from each simple cycle combustion turbine in terms of the applicable standards. The permittee shall demonstrate continuous compliance with the 3-hour rolling average CO emissions standards and with the 4-hour rolling average NO<sub>x</sub> emission standards based on data collected from each certified CEMS. Results of each RATA shall be submitted with the semiannual report. As required in Appendix CM, monitor availability shall be demonstrated by the Data Assessment Report required by Section 7 in Appendix F of 40 CFR 60. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which also reduces emissions of PM. [Permit No. 0570040-~~026~~ 32-AC; Rules 62-4.070(3) and 62-204.800, F.A.C.; and NSPS Subpart KKKK in 40 CFR 60]

**D.26. Reporting Schedule:** The following reports and notifications shall be submitted to the Compliance Authority:

<b>Report</b>	<b>Reporting Deadline</b>	<b>Related Conditions</b>
<u>CEM Continuous Compliance Data Assessment Report for Quality Assurance for each CO and CO<sub>2</sub> Monitor</u>	Done each calendar quarter and reported semi-annually to the Compliance Authority	D.14
Semiannual SIP Excess Emissions Report for CO CEMS for Each Unit	July 30 <sup>th</sup> (for January through June), and January 30 <sup>th</sup> (July through December)	D.25
Semiannual NSPS Excess Emissions Report for NO <sub>x</sub> CEMS for Each Unit	July 30 <sup>th</sup> (for January through June), and January 30 <sup>th</sup> (July through December)	D.25

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<b>Report</b>	<b>Reporting Deadline</b>	<b>Related Conditions</b>
Corrective Action Report for Monitor Availability for each CO, CO <sub>2</sub> and NO <sub>x</sub> Monitor	If monitor availability is less than 95% in any calendar quarter, provide report to Compliance Authority identifying the problems and a plan of corrective actions.	Condition 14 in Appendix CM

*{Permitting Note: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.}*

**Completion of Consent Decree Requirements U.S. EPA vs. TEC (TEC e-mail dated 3/14/2013)**

The Department will also delete in this revised Title V permit, the references to the Consent Decree between EPA and TEC since the requirements have been met as follows:

- Re-Powering Activities pursuant to Paragraphs 26 or 27.
  - Bayside Unit 1 became commercially operational on April 24, 2003. Bayside Unit 2 became commercially operational on January 15, 2004.
- Shutdown of Gannon Power Station pursuant to Paragraph 27.
  - Repowering activities are complete and the required deadlines have been satisfied. Gannon Units 5 and 6 were shutdown on January 30, 2003 and September 30, 2003, respectively. Gannon Units 1 and 2 were shutdown on April 16, 2003 and April 15, 2003, respectively. Gannon Units 3 and 4 were shutdown on November 1, 2003 and October 12, 2003 respectively.
- Coal or Fuel Usage following January 1, 2005.
  - No fuel other than natural gas has been burned at Gannon or Bayside Power Station after January 1, 2005.

**CONCLUSION**

This project revises for the second time Title V Air Operation Permit No. 0570040-027-AV, which was issued on December 07, 2009. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-213 and 62-214, F.A.C. In accordance with the terms and conditions of this permit, the above named permittee is hereby authorized to operate the facility as shown on the application and approved drawings, plans, and other documents, on file with the permitting authority.