Tampa Electric Company H.L. Culbreath Bayside Power Station Facility ID No. 0570040

Hillsborough County

FINAL-Title V Air Operation Permit RevisionRenewal

Permit No. 0570040-<mark>033<u>0XX</u>-AV</mark>

(2nd Revision of Title V Air Operation Permit No. 0570040 027 AV)



Permitting Authority:

State of Florida Department of Environmental Protection Division of Air Resource Management Office of Permitting and Compliance 2600 Blair Stone Road Mail Station #5505 Tallahassee, Florida 32399-2400

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Compliance Authority:

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Title V Air Operation Permit <u>RevisionRenewal</u> Permit No. 0570040-033<u>XX</u>-AV

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PERMITTEE: Tampa Electric Company P.O. Box 111 Tampa, Florida 33601-0111 RevisionRenewal

FLORIDA DEPARTMENT OF

ENVIRONMENTAL PROTECTION BOB MARTINEZ CENTER 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32399-2400 RICK SCOTT GOVERNOR

HERSCHEL T. VINYARD JR. SECRETARY

Permit No. 0570040-<u>0330XX</u>-AV H.L. Culbreath Bayside Power Station Facility ID No. 0570040 Title V Air Operation Permit

The purpose of this permit is to revise renew Title V Air Operation Permit No. 0570040-027033-AV for the above referenced facility. The existing H.L. Culbreath Bayside Power Station is located at 3602 Port Sutton Road, Tampa, in Hillsborough County. UTM Coordinates are Zone 17, 360.1 km East and 3087.5 km North.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Permit Revision 0570040-033-AV: Effective Date May 17, 2013 Permit Revision 0570040-029-AV: Effective Date August 2, 2010 Permit Renewal 0570040-027-AV: Effective Date: January 1, 2010 Renewal Application Due Date: May 20, 2014 Expiration Date: December 31, 2014

Jeffery F. Koerner, Program Administrator Office of Permitting and Compliance Division of Air Resource Management

JFK/sa/th

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SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The H. L. Culbreath Bayside Power Station is an electric power plant consisting of six primary electrical generating units. Unit 1 (EU 020 - 022) is a "3-on-1" combined cycle gas turbine system with a nominal generating capacity of 746 MW, which consists of three gas turbines (169 megawatt (MW) each) and one steamelectrical generator (239 MW). Unit 2 (EU 023 - 026) is a "4-on-1" combined cycle gas turbine system with a nominal generating capacity of 1090 MW, which consists of four gas turbines (169 MW each) and one steamelectrical generator (414 MW). These units fire natural gas as the exclusive fuel and employ selective catalytic reduction (SCR) to reduce emissions of nitrogen oxides (NO_X). Emissions of carbon monoxide (CO) and NO_X 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 simple cycle 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, with NO_x emissions controlled with water injection and CO emissions with catalytic oxidation. Emissions of CO and NO_x are monitored with continuous emissions monitoring systems (CEMS).

Based on the application to renew the Title V air operation permit received on May 20, 2009:

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

Title IV: The gas turbines are subject to Phase II of the acid rain provisions of the Clean Air Act.

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

<u>PSD</u>: 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.

<u>NESHAP</u>: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Part 63, Title 40, Code of Federal Regulations (CFR).

<u>NSPS</u>: The facility operates units subject to the New Source Performance Standards (NSPS) in Part 60, Title 40, CFR.

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.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description				
Regulated	Emissions Units				
008	F. J. Gannon Station Fuel Yard				
039	Diesel Generator and Fire Pump Engines				
Bayside U	nit 1 - Combined Cycle Unit with Three Gas Turbines and One Steam-Electrical Generator (746 MW, total)				
020	CT-1A – Combined Cycle Gas Turbine				
021	CT-1B – Combined Cycle Gas Turbine				
022	CT-1C – Combined Cycle Gas Turbine				
Bayside U	nit 2 - Combined Cycle Unit with Four Gas Turbines and One Steam-Electrical Generator (1090 MW, total)				
023	CT-2A – Combined Cycle Gas Turbine				
024	CT-2B – Combined Cycle Gas Turbine				

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EU No.	Brief Description
025	CT-2C – Combined Cycle Gas Turbine
026	CT-2D – Combined Cycle Gas Turbine
Bayside U	nit 3 – Simple Cycle Peaking Unit with Two Combustion Turbines and One Electrical Generator Set (62 MW)
031	Unit 3A - Simple Cycle Combustion Turbine
032	Unit 3B - Simple Cycle Combustion Turbine
Bayside U	nit 4 – Simple Cycle Peaking Unit with Two Combustion Turbines and One Electrical Generator Set (62 MW)
033	Unit 4A - Simple Cycle Combustion Turbine
034	Unit 4B - Simple Cycle Combustion Turbine
Bayside U	nit 5 – Simple Cycle Peaking Unit with Two Combustion Turbines and One Electrical Generator Set (62 MW)
035	Unit 5A - Simple Cycle Combustion Turbine
036	Unit 5B - Simple Cycle Combustion Turbine
Bayside U	nit 6 – Simple Cycle Peaking Unit with Two Combustion Turbines and One Electrical Generator Set (62 MW)
037	Unit 6A - Simple Cycle Combustion Turbine
038	Unit 6B - Simple Cycle Combustion Turbine

The terms "gas turbine" and "combustion turbine" are interchangeable. The combined cycle units are referred to as "gas turbines" pursuant to NSPS Subpart GG and the simple cycle peaking units are referred to as "combustion turbines" pursuant to NSPS Subpart KKKK. Other than the fuel yard identified above, the F. J. Gannon Units 1 - 6 and other emissions units associated with the coal-fired boilers have been permanently shut down, dismantled and removed from the site (EU-001 through EU-007 and EU-009 through EU-019). This facility also includes other miscellaneous insignificant emissions units and activities. Please reference the permit number, facility identification number, and the corresponding emissions unit identification numbers on all correspondence, test submittals, applications, etc.

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received May 20, 2009, this facility is not a major source of hazardous air pollutants (HAPs).

A summary of applicable regulations is shown in the following table.

Regulation	EU Nos.
Federal Rule Citations	
40 CFR 60, Subpart A: NSPS General Provisions	020-026, 031-038, 039
40 CFR 60, Subpart GG: Standards of Performance for Stationary Gas Turbines	020-026
40 CFR 60, Subpart IIII: NSPS Stationary Compression Ignition Internal Combustion Engines	039
40 CFR 60, Subpart KKKK: NSPS Stationary Combustion Turbines after February 18, 2005	031-038
40 CFR 63, Subpart A: NESHAP General Provisions	039
40 CFR 63, Subpart ZZZZ: NESHAP Reciprocating Internal Combustion Engines	039
40 CFR 72: Acid Rain Program Permit Regulations	020-026
40 CFR 75: Acid Rain Program Continuous Emissions Monitoring	020-026
40 CFR 77: Acid Rain Program Excess Emissions	020-026

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Regulation	EU Nos.
40 CFR 78: Acid Rain Program Appeal Procedures	020-026
40 CFR 96: Clean Air Interstate Rule	020-026
State Rule Citations	
Rule 62-204.800, F.A.C.: Federal Regulations Adopted by Reference	020-026, 031-038, 039
Rule 62-204.800, F.A.C.: Federal Regulations Adopted by Reference	020-026, 031-038, 039
Rule 62-212.400, F.A.C.: Prevention of Significant Deterioration (PSD) of Air Quality	020-026
Rule 62-213.413, F.A.C.: Fast-Track Revisions of Acid Rain Parts.	020-026
Chapter 62-214, F.A.C.: Requirements For Sources Subject To The Federal Acid Rain Program	020-026, 031-038
Rule 62-296.470, F.A.C.: Implementation of Federal Clean Air Interstate Rule	020-026, 031-038
Rule 62-296.700, F.A.C.: Reasonably Available Control Technology (RACT) for PM	008
Rule 62.296.711, F.A.C.: Materials Handling, Sizing, Screening, Crushing and Grinding Operations	008

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The following conditions apply facility-wide to all emission units and activities.

FW1. <u>Appendices</u>. The permittee shall comply with all documents identified in Section VI, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

- **FW2.** Not federally Enforceable. <u>Objectionable Odor Prohibited</u>. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- FW3. <u>General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions</u>. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. Nothing is deemed necessary and ordered at this time. [Rule 62-296.320(1), F.A.C.]
- **FW4.** <u>General Visible Emissions</u>. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]
- FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - a. Chemical or water application to unpaved roads and unpaved yard areas.
 - b. Paving and maintenance of roads, parking areas, and yards.
 - c. Landscaping or planting of vegetation.
 - d. Confining abrasive blasting where possible.
 - e. Other techniques, as necessary.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 20, 2009.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

- **FW6.** <u>Annual Operating Report</u>. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]
- FW7. <u>Annual Emissions Fee Form and Fee</u>. The annual Title V emissions fees are due (postmarked) by <u>AprilMarch-1st</u> of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

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SECTION II. FACILITY-WIDE CONDITIONS.

- **FW8.** <u>Annual Statement of Compliance</u>. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]
- FW9. Prevention of Accidental Releases (Section 112(r) of CAA).
 - As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
 - b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
 - c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.
 - d. Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to: Department of Community Affairs, Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: 850/413-9921, Fax: 850/488-1739.
 - e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www.epa.gov/osweroel/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
 - f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.
 - g. Send the required annual registration fee using approved forms made payable to: Cashier, Department of Community Affairs, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149.

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

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

EU No.	Bayside Combustion Turbines (CT)			Steam Turbines (ST)		Total
EU NO.	Unit No.	CT No.	MW, Shaft	ST Unit No.	MW, Steam	Totai
020		CT-1A	169 MW	No. 5	239	746
021	Combined Cycle Unit No. 1	CT-1B	169 MW			
022	Unit i to. i	CT-1C	169 MW			
023		CT-2A	169 MW			
024	Combined Cycle	CT-2B	169 MW	No. 6	414	1090
025	Unit No. 2	CT-2C	169 MW	NO. 0	414	1090
026		CT-2D	169 MW			
Totals	2 Combined Cycle Units	7 GTs	1183 MW	2 STs	653	1836

Bayside Unit 1 (EU 020 - 022) is a "3-on-1" combined cycle combustion turbine system consisting of three combustion turbines (169 megawatt (MW) each) and one common steam-electrical generator (239 MW) with a combined nominal generating capacity of 746 MW. Bayside Unit 2 (EU 023 - 026) is a "4-on-1" combined cycle combustion turbine system consisting of four combustion turbines (169 MW each) and one common steam-electrical generator (414 MW) with a combined nominal generating capacity of 1090 MW. The nameplate generating capacity is identified for the steam turbine-electrical generators. The final design may not fully utilize the nameplate generating capacity.

Each combustion turbine is General Electric Model PG7241(FA) combustion turbine-electrical generator set, which 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. At a compressor inlet air temperature of 59° F and firing 1,842 million British thermal units (MMBtu) per hour of natural gas, each unit produces a nominal 169 MW of shaft-driven electricity. Heat energy is recovered from each HRSG to produce steam, which is delivered to a common header to generate additional power from the steam-electrical generator set for each combined cycle unit. Each combustion turbine is equipped with dry low-NOx (DLN) combustion technology and a selective catalytic reduction (SCR) system to reduce nitrogen oxides (NOx) emissions. Each combustion turbine is equipped with continuous emissions monitoring systems (CEMS) to measure and record carbon monoxide (CO) and NOx emissions as well as flue gas carbon dioxide content. Each combustion turbine has a single exhaust stack that is 150 feet tall and 19.0 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,030,000 actual cubic feet per minute (acfm) at 220° F.

CAM Plan: Although an SCR system is required to achieve the NO_x standard, a Compliance Assurance Monitoring (CAM) Plan is not required because compliance is continuously demonstrated by CEMS.

Bayside Unit 1 became commercially operational on April 24, 2003. Bayside Unit 2 became commercially operational on January 15, 2004.

{Permitting Notes: These emissions units are regulated under: NSPS Subpart GG for Stationary Gas Turbines in 40 CFR 60 adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400, F.A.C. for the Prevention of Significant Deterioration (PSD), which required Best Available Control Technology (BACT) determinations as specified in Permit No. PSD-FL-301 (as modified) for carbon monoxide (CO), particulate matter (PM/PM₁₀), and volatile organic compounds (VOC); Chapter 62-214, F.A.C., the Phase II Acid Rain Program as specified in Section IV of this permit; and Rule 62-296.470, F.A.C., the Clean Air Interstate Rule as specified in Section V of this permit.}

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Combined Cycle Combustion Turbines (EU-020 to EU-026)

Essential Potential to Emit (PTE) Parameters

A.1. Design Capacity. The 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 equations on file with the Department. [Permit No. PSD-FL-301A (0570040-015-AC) and PSD-FL-301E (0570040-032-AC); Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.]

{Permiting 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.2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

A.3. <u>Methods of Operation</u>.

- 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. 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. 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-301E (0570040-032-AC); Rules 62-210.200(PTE), 62-213.410, F.A.C.; and, DEP/TEC Consent Final Judgment]
- b. Operating Procedures. The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines and pollution control systems in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods to minimize emissions during startup and shutdown. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
- A.4. <u>Hours of Operation</u>. These emissions units may operate continuously (8760 hours/year). [Rule 62-210.200(PTE), F.A.C., Permit No. PSD-FL-301A]

Control Technology

- A.5. <u>DLN Combustion Technology</u>. The permittee shall tune, operate and maintain the General Electric dry low-NOx combustion system (DLN 2.6 or better) to provide efficient lean premix combustion. Each system shall be maintained and tuned in accordance with the manufacturer's recommendations. [Permit No. PSD-FL-301A; Rule 62-212.400(BACT), F.A.C.]
- **A.6.** <u>SCR System</u>. The permittee shall tune, operate and maintain a selective catalytic reduction (SCR) system to reduce NOx emissions from each combined cycle gas turbine. The SCR system shall consist of an ammonia injection grid, catalyst, ammonia storage, a monitoring and control system, electrical system, piping, and other ancillary equipment. The SCR system shall be designed to reduce NOx emissions while minimizing ammonia slip within the permitted levels. *{Permitting Note: In general, the SCR system is placed in service once the exhaust gas temperature reaches 446° F.}* [Permit No. PSD-FL-301A; DEP/TEC Consent Final Judgment and Rule 62-4.070(3), F.A.C.]

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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.}

- A.7. <u>Emissions Standards Based on Performance Tests</u>: The following standards apply to each combined cycle gas turbine as determined by emissions performance tests conducted at permitted capacity. The mass emission limits are based on a compressor inlet temperature of 59° F. The permittee shall maintain on site the manufacturer's performance curves (or equations) that correct for site conditions. Operating data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.
 - a. *Ammonia Slip.* Subject to the requirements of Condition A.18 in this section, each SCR system shall be designed and operated for an ammonia slip target of less than 5 ppmvd corrected to 15% oxygen based on the average of three test runs. [Rule 62-4.070(3), F.A.C. and PSD-FL-301A]
 - b. *Carbon Monoxide (CO)*. CO emissions shall not exceed 28.7 pounds per hour and 7.8 ppmvd corrected to 15% oxygen based on the average of three test runs as determined by EPA Method 10. [Rule 62-212.400(BACT), F.A.C. and PSD-FL-301A]
 - c. Nitrogen Oxides (NOx). NOx emissions shall not exceed 23.1 pounds per hour and 3.5 ppmvd corrected to 15% oxygen based on the average of three test runs as determined by EPA Method 7E. NOx emissions are defined as oxides of nitrogen reported as NO2. [DEP/TEC Consent Final Judgment and PSD-FL-301A]
 - d. Particulate Matter (PM/PM₁₀). The exclusive firing of pipeline-quality natural gas combined with the efficient combustion design and operation of each gas turbine represent the Best Available Control Technology (BACT) requirements for particulate matter emissions. Compliance with carbon monoxide and visible emissions standards shall serve as continuous indicators of efficient combustion to minimize particulate matter emissions. No performance tests are required. [Rule 62-212.400(BACT), F.A.C. and PSD-FL-301A]
 - e. *Sulfuric Acid Mist (SAM) and Sulfur Dioxide (SO₂)*. The exclusive firing of pipeline-quality natural gas effectively limits potential emissions of SO₂ and SAM. No performance tests are required. [Design; DEP/TEC Consent Final Judgment; and PSD-FL-301A]
 - f. Visible Emissions. Visible emissions shall not exceed 10% opacity, based on a 6 minute average as determined by EPA Method 9. Except as allowed by Condition A.10 of this section, this standard applies to all loads. [Rule 62 212.400(BACT), F.A.C. and PSD FL 301A]
 - <u>e-f.</u> Volatile Organic Compounds (VOC). The exclusive firing of pipeline-quality natural gas combined with the efficient combustion design and operation of each gas turbine represent the Best Available Control Technology (BACT) requirements for VOC emissions. Compliance with carbon monoxide standards shall serve as a continuous indicator of efficient combustion to minimize VOC emissions. No performance tests are required. [PSD-FL-301A and Rule 62-212.400(BACT), F.A.C.]
- **A.8.** <u>Emissions Standards Based on CEMS Data</u>: The following standards apply to each gas turbine based on data collected from each required Continuous Emissions Monitoring System (CEMS).
 - a. *Carbon Monoxide (CO)*: CO emissions shall not exceed 9.0 ppmvd corrected to 15% oxygen based on a 24-hour block average of CEMS data.
 - b. *Nitrogen Oxides (NOx)*: NOx emissions shall not exceed 3.5 ppmvd corrected to 15% oxygen based on a 24-hour block average of CEMS data.

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Comment [ADB1]: GRU J.R. Kelly Generating Station Permit No. 0010005-009-AV, specific condition A.29 and Oleander Power Project Permit No. PSD-FL-377, specific condition 18 do not require an annual VE test for units operating on gaseous fuels. Rule 62-297.310(7)(a)5 does not require annual compliance test for particulate matter emissions when firing liquid or solid fuel for less than 400 hours per year. Based on Rule 62-297.310(7)(a)5, previously issed PSD permits, and historic VE tests results, TEC is requesting the exclusive firing of natural gas, in conjunction with meeting the CO and NOx emission limits in the permit, to be determined as PM BACT for units 1 and 2. Having VE tests as indicators of good combustion is not necessary to ensure compliand for units firing natural gas only. Both CO and NOx are monitored with CEM's to ensure compliance. TEC has provided the department with the last seven years of VE tests to provide further assurance that no visible emissions are released from the units. TEC has also provide the last two years of quarterly reports for CO and NOx emissions. TEC continuously meets the CO and NOx emission limits in the permit as a result of good combustion from the turbine. Low sulfur fuel, low NOx and CO emissions are needed to ensure no/low visible emissions are emitted. The requirement to VE test, results in excessive costs, unnecessary reporting, and plant resources being misused. TEC feels that the annual cost to test for opacity does not benefit the State in any way. Reasonable assurance is met by the type of fuel being combusted, good combustion, and the low CO and NOx emission limits.

Comment [ADB2]: VE testing is not needed as a surrogate for PM emissions. Delete VE limit.

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Each 24-hour block average shall start at midnight each operating day and shall be calculated from 24 consecutive 1-hour averages. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of the available valid 1-hour averages. [Permit No. PSD-FL-301A; Rules 62-212.400(BACT) and 62-4.070(3), F.A.C.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- A.9. <u>Excess Emissions Prohibited</u>: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. All such preventable emissions shall be included in the compliance averages determined from the CO and NOx CEMS data. [Permit No. PSD-FL-301A and Rule 62-210.700(4), F.A.C.]
- **A.10.** <u>Alternative Standards and CEMS Data Exclusion</u>: 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.
 - a. *Definitions*: The following terms are defined in Rule 62-210.200, F.A.C. "Shutdown" means the cessation of the operation of an emissions unit for any purpose. "Malfunction" means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. "Startup" means the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
 - b. Alternative Opacity During Startup and Shutdown. During startup and shutdown, the opacity of the exhaust gases shall not exceed 10%, except for up to ten 6-minute averaging periods in a calendar day during which the opacity shall not exceed 20%. Data for each 6-minute averaging period shall be exclusive from other 6-minute averaging periods.
 - c. *Low Load Operation*. Except for other authorized periods of low-load operation, each gas turbine may operate below 50% base load providing: the gas turbine is firing natural gas and operating in full dry low-NOx combustion mode; the CO and NOx CEMS are functioning properly during such periods and recording valid emissions data within the span range of the monitors; and the gas turbine remains in compliance with the CO and NOx emissions standards (24-hour block averages).
 - d. *CEMS Data Exclusion*. For the following specified operational periods, CO and NOx emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.
 - (1) *Standard Gas Turbine/HRSG Startups, Shutdowns, and Malfunctions.* For each gas turbine, no more than four 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to standard startups, shutdowns, and malfunctions (total).
 - (2) *Cold Steam Turbine Startup*. "Cold steam turbine startup" means a startup after the steam turbine has been offline for 24 hours or more, or the first stage turbine metal temperature is 250° F or less. More than one gas turbine may be used to complete a cold steam turbine startup; however, to minimize emissions, no more than one gas turbine per Bayside Unit at a time shall be operated during a cold

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steam turbine startup. For a given cold steam turbine startup, no more than sixteen 1-hour CEMS emission averages for all participating gas turbines shall be excluded from the 24-hour block compliance averages. For a gas turbine used during a cold steam turbine startup, no more than a total of sixteen 1-hour CEMS emission averages shall be excluded from any 24-hour block compliance average due to any combination of cold steam turbine startups and gas turbine/HRSG startups, shutdowns and malfunctions. In the event of a cold steam turbine startup and-gas turbine/HRSG startups, shutdowns and/or malfunctions within the same 24-hour period, a total of sixteen 1-hour CEMS emissions averages may be excluded with no more than four of those sixteen 1-hour CEMS emissions averages being excluded due to gas turbine/HRSG startups, shutdowns, and/or malfunctions (total).

- (3) Warm Steam Turbine Startup: "Warm steam turbine startup" means a startup after the steam turbine has been offline for less than 24 hours and the first stage turbine metal temperature is 250° F or more. More than one gas turbine may be used to complete a warm steam turbine startup; however, to minimize emissions, no more than one gas turbine per Bayside Unit at a time shall be operated during a warm steam turbine startup. For a given warm steam turbine startup, no more than eight 1-hour CEMS emission averages for all participating gas turbines shall be excluded from the compliance averages. For a gas turbine used during a warm steam turbine startup, no more than eight 1-hour CEMS emission averages shall be excluded from any compliance average in a 24-hour block period due to any combination of warm steam turbine startup and-gas turbine/HRSG startups, shutdowns and malfunctions. In the event of a warm steam turbine startup and-gas turbine/HRSG startups, shutdowns and/or malfunctions within the same 24-hour period, a total of eight 1-hour CEMS emissions averages may be excluded with no more than four of those eight 1-hour CEMS emissions averages may be excluded with no more than four of those eight 1-hour CEMS emissions averages being excluded due to gas turbine/HRSG startups, shutdowns, and/or malfunctions (total).
- (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-NOx (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.
 - (c) *Compressor Blade Drying*. Following a compressor blade wash in accordance with the manufacturer's recommendations (or industry standards), the permittee may operate a gas turbine at very low loads to heat and dry the compressor blades. *{Permitting Note: A gas turbine would typically operate at approximately 10% of base load or less to perform compressor blade drying.}*
 - (d) Over Speed Trip Test. As a periodic maintenance practice, the permittee may perform over speed trip tests in accordance with the manufacturer's recommendations (or industry standards). {Permitting Note: During this test, the gas turbine is operated at full speed, no load (FSNL) for approximately 5 to 6 hours. The unit is gradually accelerated to 110% speed (3960 rpm) to initiate a trip and then coasts down normally. Over speed trip tests are typically performed after a long outage or a major component overhaul.}

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To the extent practicable, the permittee shall minimize the amount and duration of emissions during periods of startup, shutdown, malfunction and other limited-use operations. If a CEMS reports emissions in excess of an emissions standard (24-hour block), the permittee shall notify the Compliance Authority within one working day with a preliminary report of: the nature, extent and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Compliance Authority may request a written summary report of the incident. All emissions data allowed for exclusion shall be summarized in the Semiannual CEMS Report required in Condition A.20 of this subsection.

(e) *Startup and Shutdown Plan*. The permittee shall maintain on site a "Startup and Shutdown Plan" that describes procedures for startup and shutdown of the Bayside Units.

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.

{Permitting Note: The durations for warm and cold steam turbine startups are not typical for combined cycle units. The Bayside Units utilize the existing Gannon steam turbines. Operating procedures require one gas turbine to operate at low loads for extended periods to gradually warm the main and hot reheat steam lines to the steam turbine as well as the steam turbine. Some steam lines are in excess of 1700 feet. Such startups are expected to occur infrequently.}

[Design; Rules 62-4.130, 62-210.700(5), and 62-212.400 (BACT), F.A.C.; Permit No. PSD-FL-301A (0570040-015-AC) and PSD-FL-301E (0570040-032-AC)]

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 the semiannual report. Permit PSD-FL-301E (0570040-032-AC); Rule 62-210.700(6), F.A.C. and 40 CFR 60.7 (c)]

Monitoring of Operations

- A.12. <u>Monitoring of Operations</u>: To demonstrate compliance with the gas turbine capacity requirements, the permittee shall monitor and record the operating rate of each gas turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEMS required above, or by monitoring daily rates of consumption and heat content of natural gas in accordance with the provisions of 40 CFR 75 Appendix D. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
- A.13. <u>Ammonia Monitoring Requirements</u>: The permittee shall calibrate, maintain and operate, in accordance with the manufacturer's specifications, an ammonia flow meter to measure and record the ammonia injection rate through each SCR system. The permittee shall document the general range of ammonia flow rates required to meet emissions limitations over the range of gas turbine load conditions allowed in this permit by comparing NOx emissions recorded by the NOx monitor with ammonia flow rates recorded using the ammonia flow meter. During NOx monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the gas turbine load. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

Continuous Monitoring Requirements

A.14. <u>Continuous Emissions Monitoring Systems</u>: The permittee shall calibrate, maintain, and operate a continuous emission monitoring system (CEMS) in the exhaust stack of each emissions unit to measure and record emissions of CO and NO_X in a manner sufficient to demonstrate compliance with the CEMS emission standards of this permit. The carbon dioxide (CO₂) content of the flue gas shall also be monitored at the location where CO and NO_X are monitored to correct the measured emissions rates to 15% oxygen. The

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oxygen content of the flue gas shall be calculated by the CEMS using the CO_2 content of the flue gas and an F-factor that is appropriate for natural gas.

- a. Emission Averages. Compliance with the 24-hour standards for CO and NO_x emissions shall be based on data collected by the required CEMS. The 24-hour block shall start at midnight of each operating day and consist of 24 consecutive 1-hour blocks. If a unit operates continuously throughout the day, the 24-hour block average shall be the average of 24 consecutive 1-hour emission averages. If a unit operates less than 24 hours during the day, the 24-hour block average shall be the average of available valid 1-hour emission averages collected during operation. If monitoring data is authorized for exclusion (due to startup, shutdown, malfunction, or tuning), the 24-hour block average shall be the average of the remaining available valid 1-hour emission averages collected during operation. Upon a request from the Compliance Authority, the NO_x emission rate shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.
- b. Data Collection. The CEMS shall be operated to sample, analyze, and record CO, CO₂, and NO_X data evenly spaced over the hour. Each 1-hour emission average shall be computed using at least one data point in each fifteen minute quadrant of the 1-hour block during which the unit combusted fuel. Notwithstanding this requirement, each 1-hour emission average shall be computed from at least two data points separated by a minimum of 15 minutes. If the unit does not operate in more than one quadrant of a 1-hour block, the data is insufficient to determine a 1-hour emission average and shall be ignored. (Example: Unit begins startup with only ten minutes remaining in the 1-hour block. Data is insufficient to determine a 1-hour emission averages. If the CEMS measures concentration on a wet basis, the CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, a curve of the flue gas moisture content versus load may be developed through manual stack test measurements and used in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). The CO and NO_X CEMS shall express the 1-hour emission averages and the 24-hour block averages in terms of "ppmvd corrected to 15% oxygen".
- c. Data Exclusion. CO, CO₂, and NO_x emissions data shall be recorded by the CEMS at all times including episodes of startup, shutdown, malfunction, and tuning. CO and NO_x emissions data recorded during such episodes may be excluded from the 24-hour block compliance averages in accordance with the requirements of Condition A.10 of this section. All periods of data excluded due to startup, shutdown or malfunction shall be consecutive for each episode. The permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited. Excluded emissions shall be summarized in the required semiannual report.
- d. NO_X and CO₂ Certifications. The NO_X and CO₂ monitors shall be operated 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_X monitor shall be performed using EPA Method 7E or 20 as defined in Appendix A of 40 CFR 60. The span for the NO_X monitor shall not

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be greater than 10 ppmvd corrected to 15% oxygen. A dual span monitor may be used. The RATA required for the CO₂ monitor shall be performed using EPA Method 3A, of Appendix A in 40 CFR 60.

- e. CO Certification. The CO monitor shall meet Performance Specification 4 in Appendix B of 40 CFR 60. Quality assurance procedures for 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 semiannually to the Compliance Authority. 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 excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calander quarter in which the unit operated for more than 760 hours. In the event 95% the applicable availability is not achieved, the permittee shall provide the Compliance Authority with a report identifying the problems in achieving 95% the required 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.

{Permitting Note: Compliance with these requirements will ensure compliance with the other applicable CEMS requirements such as: NSPS Subpart GG; Rule 62-297.520, F.A.C.; 40 CFR 60.7(a)(5) and 40 CFR 60.13; 40 CFR Part 51, Appendix P; 40 CFR 60, Appendix B - Performance Specifications; and 40 CFR 60, Appendix F - Quality Assurance Procedures.}

[Permit No. PSD-FL-301A (0570040-015-AC) and Permit PSD-FL-301E (0570040-032-AC); Rules 62-4.070(3), 62-210.700(5), and 62-212.400(BACT), F.A.C.]

Test Methods and Procedures

A.15. <u>Test Methods</u>. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy
CTM-027	<i>Procedure for Collection and Analysis of Ammonia in Stationary Source</i> : This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.
5	Determination of Particulate Matter Emissions from Stationary Sources: The minimum sampling time shall be two hours per run and the minimum sampling volume shall be 60 dscf per run.
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources: The method shall use a continuous sampling train.
18	<i>Measurement of Gaseous Organic Compound Emissions by Gas Chromatography</i> : EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Determination of Volatile Organic Concentrations

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Tampa Electric Company H.L. Culbreath Bayside Power Station Revision<u>Renewal</u> Permit No. 0570040-0330XX-AV Title V Air Operation Permit **Comment [ADB3]:** TEC is requesting condition language to be updated similar to Gainesville Renewable Energy Center, LLC permit 0010131-001-AC, section 4, appendix CEMS, condition 16. The reason for this request is due to the fact that these units typically do not have a lot of run hours. When there are any hours that have to be marked as bad (such as failed or expired calibrations) then this puts the unit well under the 95% monitor availability. When this occurs the unit is forced to run in order to obtain more operating hours in order to meet the monitor availability requirement. This but is also emitting pollutants that would not typically need to be done. TEC is seeking some relief from having to meet the 95% monitor availability based upon operating hours so that these units are not forced to run and pollutants are not unnecessarily emitted.

Except for Method 320 and Method CTM-027, the above methods are described in Appendix A of 40 CFR 60, which is adopted by reference in Rule 62-204.800, F.A.C. Method 320 is described in Appendix A of 40 CFR 63, which is adopted by reference in Rule 62-204.800, F.A.C. Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "http://www.epa.gov/ttn/emc/ctm.html". Although no specific tests are required for emissions of particulate matter and volatile organic compounds, the test methods are included for completeness. No other methods may be used for compliance testing unless prior written approval is received from the Department. [Permit No. PSD-FL-301A; Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

- A.16. <u>Common Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.17. <u>Annual-Compliance Tests</u>. During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for ammonia slip and visible emissions. The test results for ammonia slip shall also report the CO and NOx emissions recorded by the CEMS during each test run. *{Permitting Note: Continuous compliance with the CO and NOx standards will be demonstrated with certified CEMS data.}* [Permit No. PSD-FL-301A; Rules 62-212.400(BACT) and 62-297.310(7)(a)4, F.A.C.]
- **A.18.** <u>Additional Ammonia Slip Testing</u>: If the tested ammonia slip rate for a gas turbine exceeds 5 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:
 - a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
 - b. Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and
 - c. Test and demonstrate that the ammonia slip is less than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis. [Permit No. PSD-FL-301A; Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.]

A.19. <u>Compliance Testing Requirements</u>: Appendix TR of this permit identifies other compliance testing requirements commonly applicable to the emissions units in this subsection. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

A.20. <u>Semiannual CEMS Report</u>: 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; and a summary of any RATA tests performed. A report covering operations from January through June shall be submitted by July 30th of each year. A report covering operations from July through December shall be submitted by January 30th 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 PSD-FL-301E (0570040-032-AC); Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

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A.21. <u>Reporting Schedule</u>. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Data Assessment Report for Quality Assurance for the CO 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 ₂ and NO _X 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.f.
Semiannual CEMS Report for each CO and NO _X Monitor	July 30 th (for January through June), and January 30 th (July through December)	A.20.

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

[PSD-FL-301E (0570040-032-AC)]

NSPS Provisions

A.22. <u>NSPS Subparts A and GG Provisions</u>: The combined cycle gas turbines identified in this subsection are subject to applicable requirements in NSPS Subparts A (General Provisions) and GG (Stationary Gas Turbines) in 40 CFR 60. See Appendix NS and GG, respectively. Some separate reporting and monitoring may be required by the individual subparts. [Rule 62-204.800, F.A.C. and NSPS Subparts A and GG]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS. Subsection B. Fuel Yard (EU-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: 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
Fuel storage pile	FH-022/023 a & b	NA	MWS	50%
Dozer operations of storage piles	FH-044	NA	MWS	50%
Truck unloading - auxiliary	AH-001	400	MWS	85%
Storage pile	AH-002	400	MWS	90%
Truck dump to flux storage pile	OMH-001	NA	MWS	85%
Flux storage pile maintenance	OMH-002	NA	MWS	50%
Flux storage pile	OMH-003	NA	MWS	50%

Notes: "MWS" means manual water suppression. "NA" means not applicable.

{Permitting Note: The above activities are regulated under the following: Rule 62-296.711, F.A.C. (Materials Handling, Sizing, Screening, Crushing and Grinding Operation); and Rule 62-296.700, F.A.C. (Reasonably Available Control Technology (RACT) for Particulate Matter). The existing fuel yard equipment previously served F. J. Gannon Station Units 1 through 6; however, the coal-fired boilers are permanently shut down.}

Essential Potential to Emit (PTE) Parameters

- **B.1.** <u>Permitted Capacity</u>: Coal throughput for this facility shall not exceed 2.85 million tons in any 12 consecutive months. [Rules 62-4.160(2), 62-210.200 (PTE), and 62-212.400(2)(a)2, F.A.C.; Permit No. 0570040-006-AC]
- **B.2.** <u>Hours of Operation.</u> This emissions unit is allowed to operate continuously (8760 hours per year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Control Technology

B.3. <u>Control Techniques</u>: 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%. 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, 0570040-010-AC and 0570040-032-AC]

B.4. Reserved. [0570040-032-AC]

Emission Limitations and Standards

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS. Subsection B. Fuel Yard (EU-008)

B.5. <u>Visible Emissions.</u> Visible emissions generated by fugitive or unconfined particulate matter from fuel yard shall not exceed 5% opacity. *(Permitting note: The averaging time for this condition is based on the specified averaging time of the applicable test method, unless otherwise specified in this permit.)* [Rule 62-296.711(2)(a), F.A.C. and Permit No. AC29-152987]

Monitoring of Operations

- **B.6.** <u>Proper Maintenance</u>: 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 Nos. 0570040-006-AC and 05780040-032-AC]
- B.7. Reserved. [Permit 0570040-032-AC]

Test Methods and Procedures

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

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.; Permit Nos. 0570040-006-AC and 0570040-032-AC]

Recordkeeping and Reporting Requirements

- **B.9.** <u>Testing Rates</u>: All compliance testing shall be conducted during normal operation and at the maximum material (including limestone or iron ore where applicable) transfer rate attainable during the test period. [Rule 62-4.070(3), F.A.C.; Permit No. AO29-216480]
- **B.10.** <u>O&M Records</u>: Records of inspections, maintenance, and performance parameters shall be retained for a minimum of five years and shall be made available to the Compliance Authority upon request. [Rules 62-213.440(1)(b)2.b and 62-296.700(6)(e), F.A.C.]
- B.11. <u>Common Compliance Testing Requirements</u>: Appendix TR of this permit identifies other compliance testing requirements commonly applicable to the emissions units in this subsection. These include the following requirements: Rule 297.310(7)(a)9, F.A.C. (Test Notification); Rule 62-297.310(5), F.A.C. (Determination of Process Variables); Rule 62-297.310(8), F.A.C. (Test Reports); and Rule 62-297.310(7), F.A.C. (Special Compliance Tests).

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS. Subsection C. Engines (EU-039)

This section of the permit addresses the following emissions unit.

EU No.	Brief Description
039	Four Diesel Emergency Engines

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

New Source Performance Standards

- **C.1.** <u>NSPS Subpart A</u>: As identified in the above table, the engines are subject to the applicable regulations in Subpart A (General Provisions) of 40 CFR 60. See Appendix NS.
- C.2. <u>NSPS Subpart IIII</u>: As identified in the above table, the engines are subject the applicable regulations in Subpart IIII (Stationary Compression Ignition Internal Combustion Engines) of 40 CFR 60. See Appendix IIII.

National Emission Standards for Hazardous Air Pollutants

- **C.3.** <u>NESHAP Subpart A</u>: As identified in the above table, the engines are subject to applicable requirements in Subpart A (General Provisions) of 40 CFR 63. See Appendix NE.
- C.4. <u>NESHAP Subpart ZZZZ</u>: As identified in the above table, the engines are subject to applicable requirements in Subpart ZZZZ (Reciprocating Internal Combustion Engines) of 40 CFR 63. Pursuant to 40 CFR63.6590, these units comply with NESHAP Subpart ZZZZ by complying with NSPS Subpart IIII. See Appendix ZZZZ.

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

EU No.	Unit No.	Generation	Emission Unit Description
031	Unit 3A	62 MW	
032	Unit 3B	02 W W	There are four Pratt & Whitney Model No. FT8-3 Swiftpac® aero-derivative simple cycle combustion turbine peaking units. Each Swiftpac® system includes two
033	Unit 4A	62 MW	combustion turbines coupled with a single 62 MW electrical generator set. Each
034	Unit 4B	02 IVI W	combustion turbine is considered an emissions unit and will fire only natural gas. NO_X emissions are controlled with water injection; and, CO and VOC emissions are
035	Unit 5A	62 MW	controlled with an oxidation catalyst system. Each combustion turbine has a separate
036	Unit 5B	02 M W	stack that is approximately 9.5 feet in diameter and 60 feet tall. Exhaust gas exits each stack at a temperature of 893° F with a volumetric flow rate of 430,737 acfm. Each
037	Unit 6A		stack at a temperature of 895° F with a volumetric flow rate of 450,757 acim. Each stack includes a CEMS for monitoring CO and NO_X emissions.
038	Unit 6B	02 W W	

Essential Potential to Emit (PTE) Parameters

- D.1. <u>Permitted Capacity</u>: The maximum heat input rate to each simple cycle combustion turbine is 342.7 MMBtu per hour when firing pipeline-quality natural gas based on 100% load, an ambient temperature of 59° F, evaporative cooling to a 52° F compressor inlet air temperature and the HHV of the fuel. Heat input rates will vary depending upon combustion turbine characteristics, ambient conditions and evaporative cooling. The permittee shall maintain on site manufacturer's performance curves (or equations) that correct for site conditions. If these performance curves are updated, the permittee shall submit updated information to the Department. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Permit No. 0570040-026-AC and Rule 62-210.200(PTE), F.A.C.]
- D.2. <u>Authorized Fuels</u>: Each simple cycle combustion turbine shall fire only pipeline-quality natural gas, which shall contain no more than 2 grains of sulfur per 100 standard cubic feet of natural gas. [Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.]
- D.3. <u>Simple Cycle Mode</u>: Each simple cycle combustion turbine shall operate only in simple cycle mode subject to the operational restrictions specified in this subsection. This requirement is based on the permittee's initial request, which formed the basis of the PSD applicability and emission standards specified in this permit. For any request to convert these units to combined cycle operation by installing or connecting to heat recovery steam generators, including changes to the fuel or quantity related to combined cycle conversion that may cause an increase in short or long-term emissions, the permittee shall submit a full application for a PSD air construction permit modification complete with a proposed best available control technology (BACT) determination as if the simple cycle combustion turbine had never been built. [Rules 62-210.200(BACT and PTE), 62-212.400(12)(Source Obligation) and 62-212.400(PSD), F.A.C.]
- D.4. <u>Hours of Operation</u>: Each simple cycle combustion turbine is limited to a maximum of 3500 hours per year of operation. [Permit No. 0570040-026-AC; and Rules 62-210.200(PTE) and 62-212.400(12)(Source Obligation), F.A.C.]

Equipment Description

D.5. <u>Simple Cycle Combustion Turbine</u>: The permittee is authorized to operate, tune and maintain four Pratt & Whitney Model No. FT8-3 SwiftPac® aeroderivative simple cycle combustion turbine-electrical generator sets to operate in simple cycle mode. For each SwiftPac®, two combustion turbines are coupled to one

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common electrical generator set having a total nominal gross generation capacity of 62 MW. [Permit No. 0570040-026-AC and Rules 62-210.200(PTE) and 62-212.400(12)(Source Obligation), F.A.C.]

Control Technology

- D.6. <u>Water Injection System</u>: The permittee shall operate and maintain a water injection system to reduce NO_X emissions from each simple cycle combustion turbine. The water injection system shall be maintained and tuned in accordance with the manufacturer's recommendations or determined best practices to achieve the permitted NO_X emissions standards. [Permit No. 0570040-026-AC and Rule 62-4.070(3), F.A.C.]
- D.7. <u>Oxidation Catalyst System</u>: The permittee shall operate and maintain an oxidation catalyst system to reduce CO and VOC emissions from the simple cycle combustion turbines. The oxidation catalyst system shall be maintained and operated in accordance with the manufacturer's recommendations or determined best practices. [Permit No. 0570040-026-AC and Rule 62-4.070(3), F.A.C.]

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. <u>Emission Standards</u>: Emissions from each simple cycle combustion turbine shall not exceed the following standards.

Pollutant	Emission Standard ^e	Averaging Time	Compliance Method	Basis
NO _X ^a	25 ppmvd @ 15% oxygen 96 ppmvd @ 15% oxygen (operating <75% of peak load)	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.
	21 ppmvd @ 15% oxygen	3-hour rolling avg.	CEMS	Rule 62-212.400(12), F.A.C.
CO^b	9.1 lb/hour 8.2 tons/year	Average of three, 1-hour runs	Annual RATA	Source Obligation
VOC ₽	5.1 lb/hour	Average of three, 1 hour runs	One Time Initial Test CO is Surrogate	Rule 62-212.400(12), F.A.C. Source Obligation
Visible Emissions	< 20% opacity	6-minute block	Annual Test	Rule 62-296.320(4)(b)1, F.A.C.
PM ^c	2 grains sulfur/100 scf of gas	N/A	Recordkeeping	Vendor Data
SO_2^{d}	2 grains sulfur/100 scf of gas 0.060 lb/MMBtu	N/A	Recordkeeping	Rule 62-212.400(12), F.A.C. Source Obligation NSPS Subpart KKKK
SAM ^d	2 grains sulfur/100 scf of gas	N/A	Recordkeeping	Rule 62-212.400(12), F.A.C. Source Obligation

Comment [ADB5]: Based on NSPS KKKK Table 1 for turbines operating at less than 75 percent of peak load

Comment [ADB6]: Obsolete Condition. Delete. 0570040-024-AC permit does not require a VOC limit to be applicable to the unit once the initial test requirement is met.

Comment [ADB7]: 62-296.310(4)(b)1 is not a unit specific applicable requirement. Units only fire natural gas and a VE test is not needed. Requesting to delete requirement to VE test for unit 3-6. 0570040-024-AC does not have an opacity limit in the permit.

a. Continuous compliance with the 4-hour rolling average NO_x standards shall be demonstrated based on data collected by the required Continuous Emissions Monitoring System (CEMS). During an annual the Relative Accuracy Test Audit (RATA) on the NO_x CEMS, the permittee shall demonstrate compliance with the individual mass-based (lb/hour) standards.

b. An oxidation catalyst shall be installed on each simple cycle combustion turbine to minimize the emissions of CO and VOC. Continuous compliance with the 3-hour rolling average CO standards shall

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Comment [ADB3]: RATA is based on qualifying QA quarters, not an annual requirement. Delete reference to annual RATA to avoid misinterpretation of the compliance requirement.

be demonstrated based on data collected by the required CEMS. During an annual-the RATA on the CO CEMS, the permittee shall demonstrate compliance with the individual mass-based (lb/hour) standards. CO will be used as a surrogate for VOC emissions as a demonstration of good combustion. *Permitting Note: For an initial demonstration of compliance with the VOC mass based limit, a one time compliance test was conducted using EPA Method 25A on one simple cycle combustion turbine with an option to perform EPA Method 18 concurrently to deduct emissions of methane and ethane.]*

- c. The sulfur fuel specification combined with the efficient combustion design and operation of each simple cycle combustion turbine will minimize PM emissions, which are a surrogate for PM₁₀ emissions, in addition to compliance with the visible emissions standard. Compliance with the fuel specifications standards of shall serve as indicators of good combustion. Compliance with the fuel specification shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.
- d. The fuel sulfur specification effectively limits the potential emissions of SO₂ and sulfuric acid mist (SAM) from each simple cycle combustion turbine. Compliance with the fuel sulfur specification shall be the use of pipeline-quality natural gas. *{Permitting Note: Based on the fuel sulfur specification, potential SO₂ emissions are 1.9 lb/hour (0.03 lb/MWhr), which is equivalent to 0.0055 lb/MMBtu and is less than the Subpart KKKK standard of 0.060 lb/MMBtu.}*
- e. The mass-based emission standards are based on a turbine compressor inlet temperature of 59° F, evaporative cooling on, and the HHV of natural gas. Mass-based emission standards may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.
- f. Compliance with the NO_x standard shall be in accordance with the requirements of Subpart KKKK in 40 CFR 60, as described in 40 CFR 60.4350(g).

[Permitting Note: In combination with the annual restriction on hours of operation, the above emissions standards effectively limit annual potential emissions from the simple cycle combustion turbine.]

[Permit Nos. 0570040-030-AV and 0570040-032-AC; Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Subpart KKKK in 40 CFR 60]

Excess Emissions

[Permitting Note: Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS, NESHAP or Acid Rain programs.]

- D.9. <u>Excess Emissions Prohibited SIP</u>: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rules 62-210.700(4), F.A.C.]
- D.10. Excess CO Emissions Allowed SIP: If excess CO emissions occur due to startup, shutdown, malfunction, 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 15 minutes of CEMS data indicating exceedences of emission limits

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

- D.11. Excess Emissions NSPS: Excess NO_x emissions shall be regulated in accordance with 40 CFR 60.4350 and 60.4380. Excess SO₂ emissions shall be regulated in accordance with 40 CFR 60.4385. See Appendix KKKK (NSPS Subpart KKKK Requirements for Stationary Combustion Turbines) of this permit. [NSPS Subpart KKKK in 40 CFR 60 and Rule 62-204.800, F.A.C.]
- D.12. <u>Notification Requirements</u>: The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a standard subject to the specified averaging period and authorized data exclusion. The notice may be by telephone, facsimile transmittal or electronic mail. [Rule 62-4.070(3), F.A.C.]

Monitoring of Operations

D.13. <u>Monitoring of Capacity</u>: The permittee shall monitor and record the heat input rate of each simple cycle combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made by monitoring daily rates of fuel consumption and heating value of natural gas in accordance with the provisions of 40 CFR 75, Appendix D. [Rule 62-4.070(3), F.A.C.]

Continuous Monitoring Requirements

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Permit No. 0570040-033<u>0XX</u>-AV Title V Air Operation Permit Comment [ADB9]: Spelling Correction

Comment [ADB10]: NSPS monitoring of fuel sulfur for SO2 emissions is exempt pursuant to 40 CFR 60.4365 because the units fire gas from a pipeline with a valid purchase contract, tariff sheet or transportation contract for the fuel specifying the maximum total sulfur content as 20 grains of sulfur or less per 100 standard cubic feet of gas and has potential sulfur emissions of less than less than 0.060 lb SO2/MMBtu of heat input

D.14. <u>CEMS for Continuous Compliance</u>: 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_x 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_x emission standards based on data collected from each certified CEMS. Results of each RATA shall be submitted with the semiannual report. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which also reduces emissions of PM. [Permit No. 0570040-032-AC; Rules 62-4.070(3) and 62-204.800, F.A.C.; and NSPS Subpart KKKK in 40 CFR 60]

Test Methods and Procedures

- D.15. <u>Common Testing Requirements</u>: See Appendix TR (Facility-Wide Testing Requirements) of this permit for notification, testing, recordkeeping and reporting requirements regarding a performance test. [Rules 62-204.800 and 62-297.310, F.A.C. and 40 CFR 60, Appendix A]
- D.16. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Methods for Determining Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content: These methods shall be performed as necessary to support other methods.
7E	Determination of NO _X Emissions from Stationary Sources (Instrumental)
9	Visual Determination of Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography {Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. }
20	Determination of NO _X , SO ₂ , and Diluent Emissions from Stationary Combustion Turbines
25A	Determination of Total Gaseous Organic Concentrations Using a Flame Ionization Analyzer

The methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C. [Rule 62-204.800, F.A.C. and 40 CFR 60, Appendix A]

- D.17. <u>Annual Compliance Testing</u>: <u>Annual compliance tests for visible emissions shall be conducted</u> during each federal fiscal year (*October* 1st to September 30th). Data collected from the required CEMS quality assurance RATA shall be used to demonstrate compliance with the mass-based emissions standards (lb/hour) for NO_X and CO. [Rules 62-4.070(3) and 62-297.310(7)(a)4, F.A.C.]
- D.18. <u>Testing Requirements</u>: Compliance tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. For each visible emissions test, CO emissions recorded by the CEMS shall also be reported. The mass emission rate standards are based on a turbine compressor inlet temperature 59°F and 100% load. Mass emission rates may be adjusted from actual test conditions in accordance with the performance curves and/or equations on file with the Department. [Rules 62-4.070 and 62-297.310, F.A.C.; 40 CFR 60.8; and Appendix TR]
- D.19. <u>NSPS Compliance Demonstration</u>: See 40 CFR 60.4400, 60.4405 and 60.4415 in Appendix KKKK (NSPS Subpart KKKK Requirements for Stationary Combustion Turbines) of this permit. [40 CFR 60.4400

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Comment [ADB11]: VE testing not required for this emission unit.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Simple Cycle Combustion Turbines (EU-031 to EU-038)

and 60.4405; and Appendix KKKK of this permit]

D.20. <u>Special Compliance Tests</u>: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, 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. [Rule 62-297.310(7)(b), F.A.C.]

Reporting and Recordkeeping Requirements

- D.21. Combustion Turbine Replacements. The combustion turbines may be replaced with equivalent "likekind" overhauled or new combustion turbines. The overhauled or new combustion turbines shall not increase the combustion turbines maximum heat input rate or potential emissions. The replacement overhauled or new combustion turbines shall be designed to achieve the emissions standards specified in this permit. The overhauled or new combustion turbines shall be deemed to be in compliance with all emissions standards by demonstrating compliance with the NO_x and CO emission standards using data from the NO_x and CO CEMS,
- D.21.D.22. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (Facility-Wide Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C. and Appendix D of this permit]
- D.22.D.23. Monthly Operations Summary: By the 15th calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for each combustion turbine for the previous month of operation: fuel consumption, hours of operation and the updated calendar year totals for each. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. [Rule 62-4.070(3), F.A.C.]
- D.23.D.24. Fuel Sulfur Records: 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. A representative sample shall be collected using ASTM D5287. Methods for determining the sulfur content of the natural gas shall be ASTM Method D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gaseous Processors Association Standard 2377, or more recent versions. Any method deemed satisfactory for purposes of NSPS Subpart KKKK may be used to demonstrate compliance with the fuel sulfur limit for natural gas. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.; 40 CFR 60.4415; and Appendix KKKK of this permit]
- D.24.D.25. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C., and in Appendix D (Standard Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C. and Appendix D of this permit]
- D.25.D.26. Excess Emissions Reporting:
 - a. *Malfunction Notification:* If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction, the permittee shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.

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- b. SIP Semiannual Report: Within 30 days following the end of each calendar semiannual period, the permittee shall submit a report to the Compliance Authority summarizing periods of CO emissions in excess of the permit standards following the NSPS format in 40 CFR 60.7(c), Subpart A. A summary of data excluded from SIP compliance calculations should also be provided. In addition, the report shall summarize the CO CEMS system monitors availability for the previous semiannual period. Results of each RATA shall be submitted with the semiannual report.
- c. NSPS Semiannual Report: Within 30 days following the calendar semiannual period, the permittee shall submit the written reports required by 40 CFR 60, Subpart KKKK (Standards of Performance for Stationary Combustion Turbines) for the semiannual period to the Compliance Authority. Excess NO_x emissions must be reported for all periods of unit operation, including startup, shutdown and malfunction. Results of each RATA shall be submitted with the semiannual report. {Permitting Note: NSPS monitoring of fuel sulfur for SO₂ emissions is exempt pursuant to 40 CFR 60.4365 because the units fire gas from a pipeline with a valid purchase contract, tariff sheet or transportation contract for the fuel specifying the maximum total sulfur content as 20 grains of sulfur or less per 100 standard cubic feet of gas and has potential sulfur emissions of less than less than 0.060 lb SO₂/MMBtu of heat input.}

[Permitting Note: If there are no periods of excess emissions as defined in Subpart KKKK of 40 CFR 60, a statement to that effect may be submitted with the SIP Semiannual Report to suffice for the NSPS Semiannual Report.]

[Rules 62-4.130, 62-204.800 and 62-210.700(6), F.A.C.; and 40 CFR 60.7 and 60.4375]

D.26.D.27. Reporting Schedule: The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
CEM Continuous Compliance	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 th (for January through June), and January 30 th (July through December)	D.25
Semiannual NSPS Excess Emissions Report for NO _X CEMS for Each Unit	July 30 th (for January through June), and January 30 th (July through December)	D.25
Corrective Action Report for Monitor Availability for each CO, CO ₂ and NO _X Monitor	If monitor availability is less than 95% in any calendar quarter in which the unit operated for more than 760 hours, 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.}

[Permit 0570040-032-AC]

NSPS Provisions

D.27.D.28. NSPS Requirements: Each simple cycle combustion turbine shall comply with the applicable requirements in NSPS Subparts A (General Provisions) and KKKK (Standards of Performance for Stationary Combustion Turbines for which Construction is Commenced after February 18, 2005) in 40 CFR 60. See Appendix F for the NSPS Subpart A provisions and Appendix NS and KKKK, respectively. Some separate reporting and monitoring may be required by the individual subparts. [Rule 62-204.800(7)(b), F.A.C. and

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Tampa Electric Company H.L. Culbreath Bayside Power Station RevisionRenewal Permit No. 0570040-<mark>0330XX</mark>-AV Title V Air Operation Permit **Comment [ADB12]:** See Gainesville Renewable Energy Center, LLC permit 0010131-001-AC, section 4, appendix CEMS, condition 16.

Subparts A and KKKK in 40 CFR 60]

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Subsection A. Gas Turbines - Combined Cycle Units

Operated by: Tampa Electric **ORIS Code:** 7873

The emissions units listed below are regulated under Acid Rain, Phase II.

EU No.	EPA Unit ID No.	Brief Description
020	CT-1A	Combined Cycle Gas Turbine CT-1A
021	CT-1B	Combined Cycle Gas Turbine CT-1B
022	CT-1C	Combined Cycle Gas Turbine CT-1C
023	CT-2A	Combined Cycle Gas Turbine CT-2A
024	CT-2B	Combined Cycle Gas Turbine CT-2B
025	CT-2C	Combined Cycle Gas Turbine CT-2C
026	CT-2D	Combined Cycle Gas Turbine CT-2D
031	Unit 3A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 3A
032	Unit 3B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 3B
033	Unit 4A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 4A
034	Unit 4B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 4B
035	Unit 5A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 5A
036	Unit 5B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 5B
037	Unit 6A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 6A
038	Unit 6B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 6B

{Permitting Note: In accordance with the Consent Final Judgment (DEP vs. TECO) dated December 6, 1999, coal-fired Emissions Units 001 through 006 are permanently shut down. As required by these agreements, Emission Units 001 through 006 are permanently shutdown, dismantled and removed from the site. Previously, the permittee submitted the appropriate Retired Emissions Units Acid Rain forms. No fuel other than natural gas has been burned at Bayside Power Station after January 1, 2005].

- **A.1.** The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
 - a. DEP Form No. 62-210.900(1)(a), dated 05/18/2009, received 05/20/2009.
 - b. DEP Form No. 62-210.900(1)(a), dated 05/18/2009, received 05/20/2009.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

- A.2. <u>Sulfur dioxide (SO₂) Emission Allowances</u>. SO₂ emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
 - b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
 - c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c)1, 2 and 3, F.A.C.]

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Subsection A. Gas Turbines - Combined Cycle Units

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: 🛛 New Revised Renewal

STEP 1	Bayside Power Station	Florida	7873
Identify the source by plant name,	Plant name	State	ORIS/Plant Code

Identify by plant name, state, and ORIS or plant code.

STEP 2 Enter the unit ID#	а	b	c	d	e
for every Acid Rain unit at the Acid Rain source in column "a." If unit a SO ₂ Opt-in unit, enter "yes" in	Unit ID#	SO ₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO ₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
column "b".	CT1A	No	Yes	N/A	N/A
For new units or	CT1B	No	Yes	N/A	N/A
SO ₂ Opt-in units, enter the requested	CT1C	No	Yes	N/A	N/A
information in columns "d" and	CT2A	No	Yes	N/A	N/A
"e."	СТ2В	No	Yes	N/A	N/A
	Ст2С	No	Yes	N/A	N/A
	CT2D	No	Yes	N/A	N/A
			Yes		

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Subsection A. Gas Turbines - Combined Cycle Units

Bayside Power Station Name (from STEP 1)

Acid Rain Part Requirements.

Read the standard requirements.

STEP 3

- The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:

 Submit a complete Acid Rain Part application (including a complence plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.32, F.A.C.; and
 Submit in a timely memore any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or dery an Acid Rain Part.
 The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:

 Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
 Have an Acid Rain Part.

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C. (2) The emissions measurements recorded and reported in accordance with the OCFR Part 75 shall be used to elemina compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Process.

will the Add Refit emissions emineture and emissions requirements of extent divorce and emission values and enter the recommendation of the regiments of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other polularits or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the

source. (4) For applications including a SO₂ Opt-in unit, a monitoring plan for each SO₂ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shalt:

 Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extont provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 Comply with the applicable Acid Rain and a missions limitations for sulfur dioxide.
 Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide.

tire Act. (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows: (3) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or (3) Starting on the batter of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR

72.6(a)(3) ances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain (4) Allo

(ii) Program.
 (iii) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide requirements prior to the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program.
 (iii) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program.
 (iii) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program.
 (iii) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

required under 40 CFR Part 77. (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty nequired, and pay upon demand the Interest on that penalty, as required by 40 CFR Part 77; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and oparators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, inwriting by the IEPA or the IDEP:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation for the designated representation, in accordance with Rule 62-214.305, IFA.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period unit such documents are superseded because of the submission of a new certificate or forgresentation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CER Part 75, provided that to the extent that 40 CER Part 75 provides for a 3-year period for the cardkeeping, the 3-year period with 30 CER Part 75, provides that to the extent that 40 CER Part 75, provides for a 3-year period because of prior sontal pays;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and.

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Subsection A. Gas Turbines - Combined Cycle Units

Bayside Power Station	
Plant Name (from STEP 1)	

STEP 3. Continued.

Recordkeeping and Reporting Requirements (cont)

(Iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Parl 72, Subpart I, and 40 CFR Parl 75.

Liability.

Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.6, including any requirement for the payment of any penalty owed to the United States, shall be subject to enrinnent to section 173(c) of the Acid subject to enrinnel enforcement pursuant to section 173(c) of the Acid and 80.2, C. 1001.
 No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:

construed as: (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans; (2) Limiting the number of allowances a unit can hold, provider, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act; (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law; (4) Modifying the Federal Power Act or affecting the authority of the Federal Parcy Commission under the Federal Power Act; or, (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

For SO ₂ Opt-in units only.	f	. · g	h (not required for renewal application)
In column "f" enter the unit ID# for every SO ₂ Opt-in unit identified in column "a" of	Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application
STEP 2.			
For column "g" describe the			
combustion unit			
and attach information and			
diagrams on the combustion unit's			
configuration.			
In column "h" enter the hours.			

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Subsection A. Gas Turbines - Combined Cycle Units

	Plant Name (from S	Station				
	T lanc Hanne (Ironi o]		
STEP 5	i]	k	1	m	n
For SO ₂ Opt-in units only. Not required for SO ₂ Opt-in renewal applications.)	Unit ID#	Baseline or Alternative Baseline under	Actual SO ₂ Emissions Rate	Allowable 1985 SO2 Emissions	Current Allowable SO ₂ Emissions Rate	Current Promulgated SO ₂ Emission Rate under
n column "i" enter he unit ID# for	Unit ID#	40 CFR 74.20 (mmBtu)	under 40 CFR 74.22	Rate under 40 CFR 74.23	under 40 CFR 74.24	40 CFR 74.25 (lbs/mmBtu)
every SO₂ Opt-in unit identified in column "a" (and in column "f").		(111120)	(ibs/mmBtu)	(lbs/mmBtu)	(lbs/mmBtu)	(iosminolo)
or columns "j" hrough "n," enter						
he information equired under 40 CFR 74.20-74.25						· · ·
nd attach all supporting locumentation						
required by 40 CFR 74.20-74.25.						
STEP 6 For SO ₂ Opt-in units only. Attach additional equirements, ertify and sign.	 A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached. B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74. C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14. D. Attach a complete compliance plan for SO₂ under 40 CFR 72.40. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 75.53(b). The following statement must be signated by the designated representative of the combustion source: "I certify that the data submitted under 40 CFR 74.7, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way." 					
	Signature					
	aignature			Date		
STEP 7 Read the sertification statement; provide name, title, owner sompany name, shone, and e-mail	Certification (for I am authorized to ma is made. I certify und document and all its a	r designated represent ke this submission on behaff of r penalty of law that I have pers Itlachments. Based on my Inqui nation are to the best of my know atements and information or omi	the owners and operate conally examined, and a rv of those individuals y	e designated repre-	e or Acid Rain units for nents and information s for obtaining the informa	which the submissio ubmitted in this ation. I certify that th
Read the certification statement: provide	Certification (for I am authorized to ma is made. I certify und document and all its a	ke this submission on behalf of t er penalty of law that I have pers titachments. Based on my inqui nation are to the best of my know atements and information or omi	Ihe owners and operate onally examined, and a ry of those individuals v vledge and belief true, a tiling required statemen	e designated repre-	e or Acid Rain units for to nents and information s for obtaining the inform am aware that there an ing the possibility of fine	which the submissio ubmitted in this ation. I certify that th
Read the certification statement; provide name, title, owner company name, ohone, and e-mail iddress; sign, and	Certification (for I am authorized to ma is made. I certify und document and all its a statements and inform for submitting false st Byron T. Burroy	ke this submission on behalf of or penalty of law that I have pors that behave one shared on my inqui nation are to the best of my know atements and information or omi vs Company	Ihe owners and operate onally examined, and a ry of those individuals v vledge and belief true, a tiling required statemen	e designated repre- brs of the Acid Rain source min familier with, the stater with primary responsibility accurate, and complete. I ts and information, includ Manager – Air Prog	e or Acid Rain units for to nents and information s for obtaining the inform am aware that there an ing the possibility of fine	which the submissio ubmitted in this ation. I certify that th
Read the certification statement; provide name, title, owner company name, ohone, and e-mail iddress; sign, and	Certification (fc l am authorized to me is made. I certify und document and all its statements and infor for submitting false st Byron T. Burrow Name Tampa Electric	ke this submission on behalf of or penalty of law that I have pers manual that the sease of my input nation are to the best of my know atements and information or omi vs Company lame	Ihe owners and operate onally examined, and a ry of those individuals v vledge and belief true, a tiling required statemen	e designated repre- pre of the Acid Rain source m familier with, the states with primary responsibility accurate, and complete. I its and information, includ Annager – Air Prog ittle	e or Acid Rain units for ments and informations is for obtaining the inform am aware that there ar ing the possibility of fine rams, EHS	which the submissio ubmitted in this ation. I certify that th
Read the ertification itatement; provide ame, title, owner ompany name, ohone, and e-mail iddress; sign, and	Certification (fc I am authorized to me is made. I certify und document and all its statements and infor for submitting false st Byron T. Burrow Name Tampa Electric Owner Company M (813) 228-4740	ke this submission on behalf of or penalty of law that I have pers manual that the sease of my input nation are to the best of my know atements and information or omi vs Company lame	Ite owners and operate craft examined, and a yr of those individuals v viedge and bolief true, a titing required statement to be a statement T btburrows@tecc	e designated repre- pre of the Acid Rain source m familier with, the states with primary responsibility accurate, and complete. I its and information, includ Annager – Air Prog ittle	e or Acid Rain units for to nents and information s for obtaining the inform am aware that there an ing the possibility of fine	which the submissio ubmitted in this ation. I certify that th

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Subsection A. Gas Turbines – Simple Cycle Units

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: New Revised Renewal

	Bayside Power Station	Florida	7873
source me,	Plant name	State	ORIS/Plant Code

Identify the source by plant name, state, and ORIS or plant code.

STEP 1

STEP 2 Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." If unit a SO ₂ Opt-in unit, enter "yes" in column "b".	а	b	С	d	е
	Unit ID#	SO₂ Opt-In Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO ₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
	CT3A (#031)	No	Yes	N/A	N/A
For new units or SO ₂ Opt-in units, enter the requested information in columns "d" and "e."	CT3B (#032)	No	Yes	N/A	N/A
	CT4A (#033)	No	Yes	N/A	N/A
	CT4B (#034)	No	Yes	N/A	N/A
	CT5A (#035)	No	Yes	N/A	N/A
	CT5B (#036)	No	Yes	N/A	N/A
	CT6A (#037)	No	Yes	N/A	N/A
	CT6B (#038)	No	Yes	N/A	N/A
			Yes		

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Subsection A. Gas Turbines - Simple Cycle Units

Bayside Power Station
Name (from STEP 1)

Acid Rain Part Requirements.

STEP 3 Read the standard

requirements.

(1)

The designated representative of each Acid Rain source and each Acid Rain unit at the source shall: (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and (ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part; The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and (ii) Have an Acid Rain Part.

(2)

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 82-214420, FA.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions imitations and emissions reduction requirements for sulfur dock and an introgen oxides under the Acid Rain Pr

Program. (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the

source. (4) For applications including a SO₂ Opt-In unit, a monitoring plan for each SO₂ Opt-In unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-In units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:

 Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 Compliance subaccount of another initiations for sulfur dioxide.
 Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Acid.

(3)

Each ton of sulfur dioxide emilted in excess of the Acid Rain amissions limitations for sulfur dioxide shall constitute a separate violation of Act. An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows: (1) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2; or (1) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2; or (1) Starting January 1, 2000, or the deadline for monitor cartification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3). Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain or an

(a) Finite and the field of the second of the

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain until at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

(1) The designated representative of an Acid Rain unlt that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

(2)

ulred under 40 CFR Part 77. The owners and operators of an Acid Rain unit that has excess amissions in any calendar year shall: (i) Pay without demand the ponalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source ach of the following documents for a period of 5 years from the date the document [is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
 The certificate or foreventiation for the designated representation for the presentations, ha accordance with Rule 62-214.350, FA.C.; provided that the certificate and documents shall be retained on site at the source and each Acid Rain unit at the source and all documents the certificate or foreventiation, the accordance with Rule 62-214.350, FA.C.; provided that the certificate and documents shall be retained on site at the source by source and each Acid Rain unit at the source and all documents the date tractained on site at the source beyond such 5-year period unit such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for reporting the apply.
 Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

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SECTION IV. ACID RAIN PART.

Subsection A. Gas Turbines – Simple Cycle Units

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SECTION IV. ACID RAIN PART.

Subsection A. Gas Turbines - Simple Cycle Units

Bayside Power Station
Direct Manage (from CTCD 4)

Plant Name (from STEP 1)

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart 1, and 40 CFR Part 75.

Liability.

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STEP 3,

Continued.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(a) of the Act. (2) Any penson who knowingly makes a failes, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(a) of the Act and 18 U.S.C. 1001. (3) No pennit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

Takes effect.
Interest and a basis of places of places of places of the requirements of the Acid Rain Pogram.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Pogram.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain nonise at the control of the Acid Rain Program.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain multi shall also apply to the owners and operators of such source and of the Acid Rain nonise to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such source and of the Acid Rain nonise to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72-44 (Phese II repowering extension) and 40 CFR 75-11 (No. averaging) plans), and dexcept with regulation the gravitable to unit with a common stack under 40 CFR Part 78 (including 40 CFR 75-18, 75-17, 7, and 75-18), the owners and operators end the designated representative of one Acid Rain unit shall not be lable for any violation by any other Acid Rain unit al which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative of one Acid Rain they are not owners or operators or the designated representative of one Acid Rain they are not owners or operators or the designated representative of one Acid Rain unit shall not be lable for any other Acid Rain unit al which they are not avera or operators or the designated representative of operator or operators or the designate of a source or Acid Rain unit, or by an owner or operator or

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as

construed as: (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title 1 of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans; (2) Limiting the number of allowances a unit can hold, provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act; (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law; (4) Modifying the Faderal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4 For SO ₂ Opt-in units only.	f	g	h (not required for renewal application)
In column "f" enter the unit ID# for every SO ₂ Opt-in unit identified in column "a" of	Unit ID# '	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application
STEP 2.			
For column "g"			
describe the combustion unit			
and attach information and			
diagrams on the combustion unit's			
configuration.			
In column "h" enter the hours,			

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SECTION IV. ACID RAIN PART.

Subsection A. Gas Turbines – Simple Cycle Units

	Bayside Power						
	Plant Name (from S	TEP 1)					
STEP 5	I	j	ĸ	1	m	n	
For SO ₂ Opt-in units only. (Not required for SO ₂ Opt-in renewal applications.) In column "i" enter	Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20	Actual SO ₂ Emissions Rate under 40 CFR 74.22	Allowable 1985 SO ₂ Emissions Rate under 40 CFR 74.23	Current Allowable SO ₂ Emissions Rate under 40 CFR 74.24	Current Promulgated SO ₂ Emissions Rate under 40 CFR 74.25	
the unit ID# for every SO₂ Opt-in unit identified in column "a" (and in column "f").		(mmBtu)	(lbs/mmBtu)	(ibs/mmBtu)	(ibs/mmBtu)	(ibs/mmBtu)	
For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required but 40 CEB							
required by 40 CFR 74.20-74.25.							
STEP 6 For SO ₂ Opt-in units only. Attach additional requirements, certify and sign.	 A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached. B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74. C. A statement whether the combustion unit is not an affected unit under 40 CFR 74. D. Attach a complete compliance plan for SO₂ under 40 CFR 72.40. E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 75.53(b). F. The following statement must be signed by the designated representative of the combustion source: "I certify that the data submitted under 40 CFR 72 At 75.53(b). F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source and has not been adjusted in any way." 						
	Signature			Date			
STEP 7 Read the certification statement; provide name, title, owner company name,	I am authorized to ma is made. I certify und document and all its a statements and inform	r designated represent ike this submission on behalf of er penalty of law that I have per titachments. Based on my inqu nation are to the best of my knor atements and information or om	the owners and operato sonally examined, and a iry of those individuals v wiedge and belief true, a	ors of the Acid Rain source am familiar with, the stater with primary responsibility accurate, and complete.	e or Acid Rain units for u ments and information s for obtaining the information am aware that there an	ubmitted in this ation, I certify that th e significant penaltie	
phone, and e-mail address; sign, and date.	Byron T. Burrows Name Manager – Air Programs, EHS Title						
	Tampa Electric Company Owner Company Name						
	(813) 228-4740 Phone	R	btburrows@teci E-mail address	oenergy.com	4/14/10		
DEP Form No. 62-210.9	Signature			Date	11110		
Effective: 3/16/08 Fampa Electric Con			4	Perm	it No. 0570040-	0330XX-AV	
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SECTION V. CAIR PART. SUBSECTION A. Clean Air Interstate Rule Provisions

Clean Air Interstate Rule (CAIR).

Operated by: Tampa Electric Company **Plant:** H.L. Culbreath Bayside Power Station **ORIS Code:** 7873

The emissions units below are regulated under the Clean Air Interstate Rule.

EU No.	EPA Unit ID No.	Brief Description
020	CT-1A	Combined Cycle Gas Turbine CT-1A
021	CT-1B	Combined Cycle Gas Turbine CT-1B
022	CT-1C	Combined Cycle Gas Turbine CT-1C
023	CT-2A	Combined Cycle Gas Turbine CT-2A
024	CT-2B	Combined Cycle Gas Turbine CT-2B
025	CT-2C	Combined Cycle Gas Turbine CT-2C
026	CT-2D	Combined Cycle Gas Turbine CT-2D
031	Unit 3A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 3A
032	Unit 3B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 3B
033	Unit 4A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 4A
034	Unit 4B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 4B
035	Unit 5A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 5A
036	Unit 5B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 5B
037	Unit 6A	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 6A
038	Unit 6B	Aero-derivative Simple Cycle Combustion Turbine Peaking Unit 6B

A.1. <u>Clean Air Interstate Rule Application</u>. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b)) dated March 16, 2008, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

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SUBSECTION A. Clean Air Interstate Rule Provisions – Combined Cycle Units

Clean Air Interstate Rule (CAIR) Part For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

	This su	bmission is: 🛛 Ne	w 🗌 Revised	d Renewal			
STEP 1	Plant Name: Ba	ayside Power Sta	tion		State: Florida	ORIS	or EIA Plant Code:
Identify the source by plant name and ORIS or EIA plant code							7873
STEP 2	а	b	с	d	e		f
In column "a" enter the unit ID# for every CAIR unit at the CAIR source. In columns "b," "c,"	11-11-20	Unit will hold nitrogen oxides (NO _x) allowances in accordance with 40 CFR	Unit will hold sulfur dioxide (SO ₂) allowances in accordance with 40 CFR	Unit will hold NO _X Ozon Season allowances in accordance with 40 CFR	Expecte Commen Commerce	d ce :ial	New Units Expected Monitor Certification
and "d," indicate to	Unit ID#	96.106(c)(1)	96.206(c)(1)	96.306(c)(1)	Operation [Jate	Deadline
which CAIR program(s) each unit is subject by	CT1A	X	X	X	N/A		N/A
placing an "X" in the column(s).	CT1B	X	X	X	N/A		N/A
.,	CT1C	x	x	х	N/A		N/A
For new units, enter the requested information	CT2A	x	X	x	N/A		N/A
in columns "e" and "f.	CT2B	x	x	x	N/A		N/A
	CT2C	x	x	x	N/A		N/A
	CT2D	x	x	x	N/A		N/A
							-
					•		
					-		

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SECTION V. CAIR PART. SUBSECTION A. Clean Air Interstate Rule Provisions – Combined Cycle Units

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SUBSECTION A. Clean Air Interstate Rule Provisions - Combined Cycle Units

Bayside Power Station Plant Name (from STEP 1)

CAIR Part Requirements.

STEP 3 Read the

CAIR NO_X ANNUAL TRADING PROGRAM

standard requirements.

- The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:

 Submit to the DEP a complete and cartifled CAIR Part form under 40 CFR 96.122 and Rule 82-296.470, F.A.C., in accordance with the deadlines specified in Rule 82-213.420, F.A.C., and
 Berword;
 The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part Included in the Title V operating permit issued by the DEP under 40 CFR Part 86, Subpart CC, and operate the source and the unit in compliance with such CAIR Part 9art.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source and each CAIR NO_X unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 82-286.470, F.A.C. (2) The emissions measurements recorded and reported in a carodnance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_X source with the following CAIR NO_X Emissions Requirements.

NOx Emission Requirements.

As of the allowance transfor dequirements.
 (1) As of the allowance transfor development for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period from all CAIR NO_x units at the source as the accordance with 40 CFR 94.156 (b) the source's the control period from all CAIR NO_x units at the source and each CAIR NO_x units the torse of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in a contrading on the later of January 1, 2009, with a control period the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor compliance with the requirements under paragraph (1) of the NO_x Requirements, control period thereafter.
 (3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period the acalendar year before the year for which the CAIR NO_x allowance was allocated.
 (4) CAIR NO_x allowance shall be held in, daducted torm, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 196. Subpart FF and GG.
 (5) A CAIR NO_x allowance is a limited authinization to and the on of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the GAIR NO_x allowance is not constitute a property right.
 (7) A CAIR NO_x allowance is a limited authinization under 40 CFR Part 96, Subpart FF.
 (8) A CAIR NO_x allowance os and constitute a under 40 CFR Part 96, Subpart FE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x and source that includes the CAIR NO_x unit.

Excess Emissions Requirements,

If a CAIR NO_X source emits NO_X during any control period in excess of the CAIR NO_X emissions limitation, then: (1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under 40 CFR 861 (sh(1)f) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and (2) Each tor of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR 81 state law; the Clean Ar Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source schall keep on site at the source acid of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The cortificate of representation under 40 CFR 98.113 or the CAIR NO_x source and each CAIR NO_x unit at the source and each CAIR NO_x unit at the source and all documents is that demonstrate the thruth of the statements in the certificate of representations. If the cortificate and documents shall be retained on site at the source beyond such System provident Mission for a new cortificate of representation under 40 CFR 98.113 changing the CAIR designated representation.
(ii) All emissions monitoring information, in accordance with 40 CFR 98.135 when give the activity of this part, provided that the authrision of a new cortificate of representation under 40 CFR 98.113 changing the CAIR designated representation.
(iii) All emissions monitoring information, in accordance with 40 CFR 98.135 when give and and the CFR 98.135 when give and and the cartificate and the submission for a new cortificate of representation.

Trading Program. (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program. (2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part BB, Subpart HH.

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SUBSECTION A. Clean Air Interstate Rule Provisions - Combined Cycle Units

Bayside Power Station Plant Name (from STEP 1)

Liability.

STEP 3, Continued

(1) Each CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program.
(2) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source or the CAIR designated representative of a CAIR NO_x source shall also apply to the owners and operators of such source and of the CAIR NO_x units at the source.
(3) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source so this CAIR designated representative of a CAIR NO_x with all also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicative, approved State Implementation Plan, a federally endocasable permit, or the Clean AIr Act.

CAIR SO2 TRADING PROGRAM

CAIR Part Requirements.

- The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall:
 Submit to the DEP a complete and cartiliad CAIR Part form under 40 CFR 98.222 and Rule 62-2396.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.402, F.A.C.; and
- (ii) [Reserved];
 (2) The owners and operators of each CAIR SQ₂ source and each CAIR SQ₂ unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and record/keeping requirements of 40 CFR Part 46, Subpart HHH, and Rule 62-398,470, FA.C.
 The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a transage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 98 254(a) and (b), not less than the torns of total sulfir dioded emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 40 CFR 98 200 period. The CAIR SO₂ unit shall be subject to the nonjurements under 40 CFR 98.270(b)(1) or (2) and for each control pariod threadler.

of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 94 0 CFR 96.270(b)(1) or (2) and for each cantrol period threadler. (3) A CAIR SO₂ allowance shall not be deducted for compliance with the requirements under paragraph (1) of the SO₂ Emission Requirements, for a control period in a calendary rever before the year for which the CAIR SO₂ allowance was allocated. (4) CAIR SO₂ allowance is all he held in, deducted from, or transferred into or arrong CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 16, Subparts FFF and GGG. (5) A CAIR SO₂ allowance is a limited authorization to emit suffur dioxide in accordance with the CAIR SO₂ Allowance. The or period the caller SO₂ and the CAIR Part of the CAIR SO₂ allowance is a limited authorization to emit suffur dioxide in accordance with the CAIR SO₂ allowance to a limit the CAIR SO₂ allowance is a limited authorization to emit suffur dioxide in accordance with the CAIR SO₂ allowance is a limited authorization to emit suffur dioxide in accordance with the CAIR SO₂ and be construed to limit the authority of the stele or the United States to terminate or limit such authorization. (6) A CAIR SO₂ allowance des not constitute a property right. (7) Upon recordation by the Administrator under 40 CFR 98 St. CaGG, every allocation, transfer, or deduction of a CAIR SO₂ and allowance to or from a CAIR SO₂ unit's compliance account is incorporated automalically in any CAIR Part of the source that includes the CAIR SO₂ unit.

Excess Emissions Requirements.

If a CAIR SO₂ source emits SO₂ during any control period in axcess of the CAIR SO₂ emissions limitation, then: (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ ellowences required for deduction under 40 CFR 98.254(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law, and (2) Each ton of such average amissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

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SUBSECTION A. Clean Air Interstate Rule Provisions - Combined Cycle Units

Bayside Power Station Plant Name (from STEP 1)

STEP 3, Continued

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of Syears from the date the document is created. This period may be extended for cause, at any time before the end of Syears, in writing by the Department or the Administrator.
(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that domonstrate the thruth of the satisments in the certificate of representation, under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that domonstrate the thruth of the statements in the certificate of representation under 40 CFR 96.213 charging the CAIR edsignated representation; provided that the certificate and documents are superaided because of the submission of a new certificate of representation under 40 CFR 96.213 charging the CAIR edsignated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, provides for a 3yaar praind shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Treding Program.

(iii) Caples of all reports, comparing commanders, and service and any other submission under the CAIR SO₂ Trading Program.
 (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.
 (2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.
(2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.
(3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO₂ source or CAIR SO₂ unit from compliance with eny other provision of the applicative, approved State implementation Flan, a federally endirected permit, or the Clean AIR Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO₂ Ozone Season source and each CAIR NO₂ Ozone Season unit at the source shall: (i) Submit to the DEP a complete and carified CAIR Part form under 40 CFR 98.322 and Rule 82-298.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and (ii) [Reserved]; (2) The owners and operators of each CAIR NO₂ Ozone Season source required to have a Title V operating permit or air construction sermit.

(ii) [Heserveq]; (iii) [Heserveq]; (ii) The owners and operators of each CAIR NO_X Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_X Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_y Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 69, Subpart HHH, and Rule 02-269, 470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 98, Subpart HHHH, shall be used to determine compliance by each CAIR NOy Course Season Emissions measurements and exceeded and reported in accordance with 40 CFR Part 98, Subpart HHHH, shall be used to determine compliance by each CAIR NOy Course Season Season source with the following CAIR NOy. Course Season Emissions Resease Emissions Resease Emissions Resease Emissions Resease Emissions Reseased Emissions Reseased Emissions Researcements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 98.354(a) in an annount not less than this tens of total NO_x emissions for the control period under 40 CFR 98.354(a) in an annount not less than the tons of total NO_x emissions for the control period torm at the source addemined in accordance with AO CFR 98.354(a) in a control period torm at CAIR NO_x Cozone Season allowances available for compliance deductions for the control bench to the control period torm at the source addemined in accordance with AO CFR 98.354(a) in a single of the AO CFR 98.354(a) in a control period torm at the source addemined in accordance with AO CFR 98.354(a) (A), or (3) and for each control period thereafter.
(3) A CAIR NO_x Cozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Cozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Cozone Season allowance shall not be deducted, for compliance with the CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the CAIR NO_x Cozone Season allowance shall not be deducted are period thereafter.

allocated.
 (4) CAR NO₂ Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO₂ Ozone Season Allowanca Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
 (5) A CAIR NO₂ Ozone Season allowance is a limited authorization to emit one to not NO₂ in accordance with the CAIR NO₂ ozone Season Trading Program. No provision of the CAIR NO₂ Ozone Season Trading Program, the CAIR PArt, or an exemption under 40 CFR Basis of the United States to terminate or limit such authorization.
 (6) A CAIR NO₂ Ozone Season allowance des not consilius a property dipt.
 (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO₂ Ozone Season allowance to ar GM or CAIR NO₂ Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO₄ Ozone Season unit.

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SUBSECTION A. Clean Air Interstate Rule Provisions - Combined Cycle Units

Bayside Power Station Plant Name (from STEP 1)

STEP 3. Continued

Excess Emissions Requirements.

If a CAIR NO₂ Ozone Season source emits NO₂ during any control period in excess of the CAIR NO₂ Ozone Season emissions limitation, then: (1) The owners and operators of the source and each CAIR NO₂ Ozone Season unit at the source shall surrender the CAIR NO₂. Ozone Season allowances required for doduction under 40 CFR 08.354((4)) and pay any fino, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and (2) Each tion of such excess emissions and nach day of such control period shall constitute a separate violation of 40 CFR Part 98, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source achi deep on site at the source achi deep on site at the source achi deep on site at the source achi de the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate or presentation under 40 CFR 93.315 or the CAIR NO_X operander or presentations; period that the more achieves and all documents that demonstrate the that the more and each CAIR NO_X operand that the source achieves and all documents that demonstrate the turn to the statements in the certificate or presentation; provided that the source achieves and all documents that all encodes beyond such S-year period unit such documents and use presentation under 40 CFR 96.113 Junning the CAIR designated representation.
(ii) All entities the relatived on accordance with AO CFR period Store Student that 40 CFR Period Store Sto

(iii) To provide Programs to the second seco

Liability.

(1) Each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall meet the requirements of the CAIR NO_X Ozone Season

Each CAIR NO₂ Usand Statistical and tasked one risk, assessed and tasked one risk assessed and the cair NO₂ assesses assesses and the cair NO₂ assesses assesses assesses as a set of the cair NO₂ assesses assesses as a set of the cair NO₂ assesses assesses assesses assesses as a set of the cair NO₂ assesseses as a set of the cair NO₂ assesses as a set of the cair NO

Effect on Other Authorities.

No provision of the CAIR ND_x Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 86.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Zoone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable pointil, or the Clean Air Act.

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar which, the statements and information submitted in this incomment and will is attachments. Based on my includy of those individuals with primary responsibility to robaining the information, certify that here the set of the statements and information are to be best of my knowledge and belief true, accurate, and complete, and are wate that they are significant imprisonment. Including the possibility for the set of the or imprisonment.

STEP 4 Certification (for designated representative or alternate designated representative only)

Read the certification statement; provide name, title, owner company name. phone, and e-mail address; sign, and date

Byron T. Burrows Name		Manager – Air Programs, EHS Title			
Tampa Electric Company Owner Company Name					
(813) 228-4740 btburro Phone E-mail ad		vs@tecoenergy.com			
size Dibu	~	Date 5/18/09			

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SECTION V. CAIR PART. SUBSECTION A. Clean Air Interstate Rule Provisions – Combined Cycle Units

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SUBSECTION A. Clean Air Interstate Rule Provisions - Simple Cycle Units

Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

State:

Florida

ORIS or EIA Plant Code:

07873

This submission is: 🗌 New 🛛 Revised 🔲 Renewal

	FE	P	1
31		Γ.	- 1

Identify the source by plant name and ORIS or EIA plant code Plant Name:

H.L. Culbreath Bayside Power Station

	(
STEP 2	а	b	C	đ	e	f
In column "a" enter the unit ID# for every CAIR unit at the CAIR source. In columns "b," "c,"	Unit ID#	Unit will hold nitrogen oxides (NO _X) allowances in accordance with 40 CFR 96.105(c)(1)	Unit will hold sulfur dioxide (SO ₂) allowances in accordance with 40 CFR 95.206(c)(1)	Unit will hold NO _X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
and "d," indicate to which CAIR program(s)	CT3A (#031)	x	x	x	NA	NA
each unit is subject by placing an "X" in the	CT3B (#032)	х	x	х	NA	NA
column(s).	CT4A (#033)	. X	x	x	NA	NA
For new units, enter the	CT4B (#034)	X	х	x	NA	NA
requested information in columns "e" and "f.	CT5A (#035)	х .	х	x	NA	NA
	CT5B (#036)	х	Х	x	NA	NA
	CT6A (#037)	X	X	x	NA	NA
	CT6B (#038)	Χ.	×	x	NA	NA
			•			

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SUBSECTION A. Clean Air Interstate Rule Provisions - Simple Cycle Units

H.L. Culbreath Bayside Power Station

CAIR Part Requirements.

Plant Name (from STEP 1)

CAIR NO_X ANNUAL TRADING PROGRAM

STEP 3

Read the standard requirements.

(1)

- The CAIR designated representative of each CAIR NO_X source and each CAIR NO_X unit at the source shall: (I) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
- Generating provides and the operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall have a CAIR Part included in the Tille V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part. (2)

Monitoring, Reporting, and Recordkeeping Requirements,

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordivelying requirements of 40 CFR Part 96, Subpart HH, and Rule 82-286.470, F.A.C. (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, and Ibe used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source is compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in a mount not less than the ions of total NO_x emissions for the control period from all CAIR NO_x units at the source's compliance account, CAIR NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, 50bpart HH.
 (2) A CAIR NO_y unit shall be aubject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under Paragraph (1) of the NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x allowance shall be the din, deducted for compliance with the requirements under paragraph (1) of the NO_x allowance tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
 (3) A CAIR NO_x allowance is all lib the diff. deducted from one ton of NO_x in accordance with the CAIR NO_x allowance is a limited authorization to emit one on of NO_x in accordance with the CAIR NO_x annual Tracking Program. No provision of the Active ACIA Annual Tracking Program. No CAIR Part 96, Subparts FF and GG.
 (5) A CAIR NO_x allowance is a limited authorization to emit one on of NO_x in accordance. With the CAIR NO_x annual Tracking Program. No forovision of the Active NO_x annual Tracking Program. No CAIR Part 96, Subpart 55 and no provision of law shall be accordance with the CAIR NO_x annual Tracking Program. No CAIR Part 96, allowance to or from a CAIR NO_x allowance to a control period state to the United States to terminate or limit such authorization.
 (6) A CAIR NO_x allowance does not constil

NO_x unit.

Excess Emissions Requirements.

If a CAIR NO_X source emits NO_X during any control period in excess of the CAIR NO_X emissions limitation, then: (1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_X allowances required for deduction under 40 CFR 80.145(40)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law, and (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The cortificate of representation under 40 CFR 86.113 for the CAIR Resignated representative for the source and each CAIR NO_x unit at the source and all documents that domonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents that ib retained on site at the source barve barve abust out. 5 year period unit auxit documents are superseded because of the submission of a new certificate or representation, in accordance with 40 CFR Part 86, Subpart HH, or this part, provided that to the extent that 40 CFR Part 86, Subpart HH, or this part, provided that to the extent that 40 CFR Part 86, Subpart HH, or this part, provided that to the extent that 40 CFR Part 86, Subpart HH, provided that to the CAIR NO_x Annual Trading Program.

(iii) Copies of all reports, comparate or annexation, and other submission under the CAIR NO_X Annual Trading Program.
 (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program.
 (2) The CAIR designated representative of a CAIR NO_X source and each CAIR NO_X unit at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

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SUBSECTION A. Clean Air Interstate Rule Provisions – Simple Cycle Units

H.L. Culbreath Bayside Power Station Plant Name (from STEP 1)

STEP 3, Continued

Liability.

(1) Each CAIR NO_X source and each CAIR NO_X unli shall meet the requirements of the CAIR NO_X Annual Trading Program.
(2) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X source or the CAIR designated representative of a CAIR NO_X source shall also apply to the owners and operators of such source and of the CAIR NO_X units at the source.
(3) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X units at the source.
(3) Any provision of the CAIR NO_X and Trading Program that applies to a CAIR NO_X unit or the CAIR designated representative of a CAIR NO_X unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source or CAIR NO_X until from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall: () Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C., and (ii) [Reserved];
- (2) The owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and recordinging requirements of 40 CFR Part 96. Subpart HHH, and Rule 92-296.470, F.A.C. (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96. Subpart HHH, shall be used to determine compliance by each CAIR SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 98.254(a) and (b), not less than the tons of total suffur dioxide emissions for the control period from all CAIR SO₂ unit at the source, as determined in accordance with 40 CFR Part 98, Subpart HHL.
 (2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (1) of the Suffur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 98.270(b)(1) or (2) and for each control and theraelter.

period thereafter. (3) A CAR SQ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SQ ± Emission Requirements, for a control period in a calendar year before the year for which the CAIR SQ, allowance was allocated. (4) CAIR SQ allowances shall be hald in, deducted from, or transferred into or among CAIR SQ, Allowance Tracking System accounts in accordance with 40 CFR Part 86, Subparts FFF and GGG. (5) A CAIR SQ, allowance is a limited authorization to amit suffur dioxide in accordance with the CAIR SQ. Tracting Program. No provision of the CAIR SQ, Tarding Program, the CAIR Part, or an exemption under 40 CFR 86,205 and no provision of law shell be construed to limit the authority of the state or the United States to terminate or limit suffur dioxide in accordance were sufficient to a shell be construed to limit the authority of the state or the United States to terminate or limit suffur dioxide in accordance were sufficient to a shell be construed to limit the authority of the state or the United States to terminate or limit suffur dioxide in accordance were sufficient to a shell be construed to limit the authority of the state or the United States to terminate or limit sufficient authorization. (6) A CAIR SQ, allowance does not constitute a property right. (7) Upon recordation by the Administrator under 40 CFR Part B6, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SQ, allowance to or from a CAIR SQ, units compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SQ, unit.

Excess Emissions Requirements.

If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then: (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR 98.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Cican Air Act or applicable state law, and (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Ciean Air Act, and applicable state law.

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SUBSECTION A. Clean Air Interstate Rule Provisions - Simple Cycle Units

Plant Name (from STEP 1)

Recordkeeping and Reporting Requirements.

H.L. Culbreath Bayside Power Station

STEP 3, Continued

(1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.
(1) The certificate of representation under 40 CFR 96.13 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents that all be relatined on site at the source beyond source boynd extor for year period to the counter state and the relative for the statements in the certificate of representation, provided that the certificate and documents shall be relatined on site at the source beyond source boynd extor for year period to the counter state documents are superseded because of the submission of a new certificate of representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 98, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 80, Subpart HHH, provides for a 3-year period for recordexepting the 3-year period for documents and spaty.
(ii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.

(II) Copies of all reports, compliance canceurs, and wave accurate to the program.
 (N) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.
 (2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 80, Subpart HHL.

Liability.

(1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.
(2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ unit at the source.
(3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ unit of the CAIR SO₂ unit at the source.

Effect on Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR Part, or an exemption under 40 CFR 96,205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, or CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State implementation Plan, a federally enforceable permit, or the Ciena Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

The CAIR designated representative of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall: (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 66.322 and Rule 62-296.470, F.A.C., in accordance with the deadhnes specified in Rule 62-213.420, F.A.C.; and (1) deadlines specil (ii) [Reserved];

(II) [Reserved]; (2) The owners and operators of each CAIR NO_X Ozona Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_X Ozona Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 90, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X Ozone Season source and each CAIR NO_y Ozone Season unit at the source shall comply with the monitoring, reporting, and recordiscepting requirements of 40 CFR Part 98, Subpart HHHH, and Rule 82-298.470, FAC.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 98, Subpart HHHH, shall be used to determine compliance by each CAIR NO_X Ozone Season source with the following CAIR NO_X Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season allowances available for compliance deductions for the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_X emissions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_X amissions for the control period from all CAIR NO_X Ozone Season units at the source, as datarmined in accordance with 40 CFR 94.768, Subjert HHHH, (2) A CAIR NO_X Ozone Season units shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor cardification requirements under avarparph (1) of the NO_X Ozone Season allowances shall hot be deducted, for compliance with the requirements under paragraph (1) of the NO_X Ozone Season allowances shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_X Ozone Season allowance shall not be deducted, for compliance with the CAIR NO_X Czone Season allowance was allocated.

Season Emission Requirements, for a control period in a calendar year using each to minute an extension a control period in a calendar year using each to minute an extension of the allocated. (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season (6) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Tracking Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 98.305 and no provision of have shall be construed to limit the authorization to emit one to the torminate or limit such authorization. (6) A CAIR NO_x Ozone Season allowance does not constitute a property right. (7) Upon recordation by the Administrator under 40 CFR 9165, Subpart BEEEF, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x Ozone Season unit.

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SUBSECTION A. Clean Air Interstate Rule Provisions – Simple Cycle Units HL Cubmeth Bayels Power Staton Part Name (tim STEP 1) Excess Emission Reculterments. If a CMR NO, Come Season acture areas and an CLER NO, Come Season of the CAR NO, Come Season and the State Provide the CAR NO, Come Season and and No 4 CIR PR 3354(07) and pay my Res, penalty, or assessment or comply with any other mend invences required for cidulcies under 40 CIR 9334(07) and pay my Res, penalty, or assessment or comply with any other mend invences required for cidulcies under 40 CIR 9334(07) and pay my Res, penalty, or assessment or comply with any other mend invences required for cidulcies under 40 CIR 9334(07) and pay my Res, penalty, or assessment or comply with any other mend invences required for cidulcies under 40 CIR 9334(07) and pay my Res, penalty, or assessment or comply with any other mend invences in a state in the source and and hay of auto-control period shall contribute of 40 CIR Part 64, State AAAAA, to be and AAAA and regitable with and control beam AAAA, and any time before the and of years, in which the acture and and AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		SECTION V	. CAIR P	ART.		
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source shall keep on site at the source each of the following documents for a period of 5 years, in willing by the DEP or the Administrator. (i) The catfficate of regresentation under 40 CPR 96.313 for the CAR designated more semilative for the source and each CAR NO, Season und at the source and decourses that documents that demonstrate the twint of the setements of the constrainties of a new certificate of regresentation under 40 CPR 86.113 charging by the CAR designated more semilative of the source and each CAR NO, Conse Season Trading Program. (ii) All erristons monitoring thefates of a new certificate of regresentations, and other software source and each the document to the setements of the CAR NO, Conse Season Trading Program. (iii) Captes of a lengots, compliance certifications, and other software source and each CAR NO, Conse Season Trading Program. (ii) Captes of a lengots, compliance with the requirements of the CAR NO, Conse Season Trading Program. (ii) Captes of a lengots, compliance with the requirements of the CAR NO, Conse Season Trading Program. (iii) Each CAR NO, Coone Season source and each CAR NO, Coone Season Trading Program. (ii) Each CAR NO, Coone Season source and each CAR NO, Coone Season Trading Program. (iii) Each CAR NO, Coone Season source and each CAR NO, Coone Season source or the CAR NO, Coone Season trading Program. (ii) Each CAR NO, Coone Season source and each CAR NO, Coone Season unit at the CAR NO, Coone Season trading Program. (ii) Each CAR NO, Coone Season source and each CAR NO, Coone Season unit at the CAR NO, Coone Season trading Program that explies to a CAR NO, Coone Season source or the CAR NO, Coone Season trading Program. (iii) Any provision of the CAR NO, Coone Season Trading Program that explise to a CAR NO, Coone Season source or the CAR NO, Coone Season trading Program that explise to a CAR NO, Coone Season trading Program that explise to a CAR NO, Coone Season trading Program that explise to a CAR NO, Coone Season trading Program that explise to a CAR NO, Coo		Recordkeeping and Reporting Requirement	<u>s</u> .			
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STEP 4 Certification (for designated representative or alternate designated representative only) Read the certification statement; provide no main and bit submission on behalf of the owners and operators, and the claim designated representative only) I am authorized to make this submission on behalf of the owners and operators, and the claim designated representative only) I am authorized to make this submission on behalf of the owners and operators, and am familiar within the submission, i certification statement; provide name, title, owner Read the certification statement; provide name, title, owner, and e-mail address; sign, and date. Paul L. Carpinone Acid Rain Designated Representative Paul L. Carpinone Acid Rain Designated Representative Name Title Tampa Electric Company Company Owner Name (eff) 228-4858 picarpinone@teconergy.com Phone E-mail Address		Effect on Other Authorities.				
Read the certification statement; provide name, title, owners, and enames, title, owner, and e-mail address; sign, and date. I am authorized to make this submitsel on the head of the owners and operators of the CAIR ecure or CAIR unlis for which the submitsel in the statement; provide name, title, owner, and e-mail address; sign, and date. Paul L. Carpinone Acid Rain Designated Representative Paul L. Carpinone Acid Rain Designated Representative Tampa Electric Company Tampa Electric Company (d13) 228-4958 plcarpinone@teconergy.com Phone E-mail Address		exempling or excluding the owners and operators, and the Ozone Season unit from compliance with any other provise	e CAIR designat	ed representative, of a CA	IR NO _x Ozone Season source or CAIR N	10x
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company name, phone, and e-mail address; sign, and date. Paul L. Carpinone Name Acid Rain Designated Representative Title Tampa Electric Company Company Owner Name Title (813) 228-4858 picarpinone@teccenergy.com Phone E-mail Address	STEP 4	Certification (for designated representativ	e or alterna	te designated repre	esentative only)	
phone, and e-mail address; sign, and date. Name Title Tampa Electric Company Company Owner Name Title (813) 228-4858 picarplinone@teccenergy.com Phone E-mail Address	certification statement; provide name, title, owner	I am authorized to make this submission on behalf of the o made. I cardify under penalty of law that I have personally document and all its attachments. Based on my inquivof the statements and Information are to the best of my know penalties for submitting false statements and information o imprisonment.	where and opera examined, and a those individuals ledge and belief r omitting require	ators of the CAIR source o im familiar with, the statem s with primary responsibilit frue, accurate, and comple ed statements and informa	r CAIR units for which the submission is leads and information submitted in this yor obtaining the information, I certify the ste. I am aware that there are significant ton, including the possibility of time or	at
address; sign, and date. Tampa Electric Company Company Owner Name (813) 228-4858 picarpinone@teccenergy.com Phone E-mail Address		Paul L. Carpinone		Acid Rain Designat	ed Representative	
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DEP Form No. 62-210.900(1)(b) - Form Effective: 3/15/08

Tampa Electric Company H.L. Culbreath Bayside Power Station RevisionRenewal

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