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SEP 12 2011

DIVISION OF AIR
RESOURCE MANAGEMENT

21 West Church Street
Jacksonville, Florida 32202-3139

September 7, 2011



Mr. Martin Costello, P.E.
Professional Engineer
Office of Permitting and Compliance
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Project No. 0310561-004-AC -
PSD 401A

RE: JEA Greenland Energy Center
Air Construction Permit PSD-FL-401
Request for Permit Revision

ELECTRIC

WATER

SEWER

Dear Mr. Costello:

The purpose of this construction permit revision request is to extend the expiration date to the end of 2013 to allow construction of one of the fuel oil storage tanks, to request combined processing of the construction permit and Title V permit, to waive the processing time requirements to accommodate these changes, and to request certain language changes as outlined in the attached marked-up construction permit.

If you have any questions or need additional information, please don't hesitate to call me at 904-665-6247.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Bert Gianazza", is written over a horizontal line.

N. Bert Gianazza, P.E.
Professional Engineer

cc: Richard Robinson, P.E., ECD



Department of Environmental Protection

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BUREAU OF AIR REGULATION

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: JEA	
2. Site Name: Greenland Energy Center	
3. Facility Identification Number: 0310561	
4. Facility Location Street Address or Other Locator: 6850 Energy Center Drive City: Jacksonville County: Duval Zip Code: 32256	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Application Contact

1. Application Contact Name: N. Bert Gianazza, P.E.	
2. Application Contact Mailing Address... Organization/Firm: JEA Street Address: 21 West Church Street City: Jacksonville State: FL Zip Code: 32202-3139	
3. Application Contact Telephone Numbers... Telephone: (904) 665-6247 ext. Fax: (904) 665-7376	
4. Application Contact E-mail Address: giannb@jea.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 9-12-11	3. PSD Number (if applicable):
2. Project Number(s): 0310561-004-AC	4. Siting Number (if applicable):

-PSD 401 A



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

JEA requests that permit number 0310561-001-AC/PSD-FL-401 be revised to make the modifications specified in the attached marked up construction permit. JEA requests that FDEP combine this revision to the construction permit with the current Initial Title V application submitted on July 8, 2011.

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”

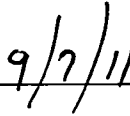
1. Application Responsible Official Name: Mr. James M. Chansler, P.E., D.P.A., Chief Operating Officer
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: JEA Street Address: 21 West Church Street City: Jacksonville State: FL Zip Code: 32202
4. Application Responsible Official Telephone Numbers... Telephone: (904) 665-4433 ext. Fax: (904) 665-7990
5. Application Responsible Official E-mail Address:

6. Application Responsible Official Certification:

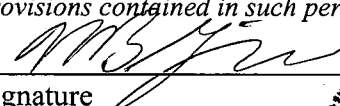
I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.


Signature

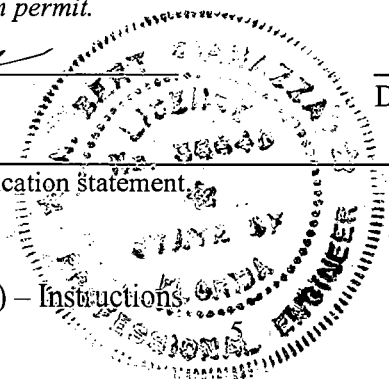



Date

Professional Engineer Certification

1. Professional Engineer Name: N. Bert Gianazza Registration Number: 38640
2. Professional Engineer Mailing Address... Organization/Firm: JEA Street Address: 21 West Church Street City: Jacksonville State: FL Zip Code: 32202
3. Professional Engineer Telephone Numbers... Telephone: (904) 665-6247 ext. Fax: (904) 665-7376
4. Professional Engineer E-mail Address: giannb@jea.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> Signature  Date <u>9/7/11</u> (seal)

* Attach any exception to certification statement.



PERMITTEE:

JEA – Greenland Energy Center
21 West Church Street
Jacksonville, Florida 32202

Authorized Representative:
Mr. James M. Chansler, P.E., Chief Operating Officer

Greenland Energy Center	
Two Simple Cycle Combustion Turbines	
Permit No.	PSD-FL-401
Project No.	0310561-001-AC
Expires:	December 31, 201 <u>2</u> 13

PROJECT AND LOCATION

This permit authorizes the construction of two General Electric PG7241FA simple cycle combustion turbine electrical generators with a nominal output of 352 megawatts (MW) on natural gas and 380 MW on ultra low sulfur fuel oil at the new Greenland Energy Center. The new facility site is at 12121 Phillips Road, Jacksonville, in Duval County.

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The project was processed in accordance with the requirements of Rule 62-212.400, F.A.C., the preconstruction review program for the Prevention of Significant Deterioration (PSD) of Air Quality. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

CONTENTS

- Section I. General Information
- Section II. Administrative Requirements
- Section III. Emissions Units Specific Conditions
- Section IV. Appendices

Joseph Kahn, Director
Division of Air Resource Management

Effective Date

SECTION I - GENERAL INFORMATION

FACILITY DESCRIPTION

The proposed facility is a new electric-generating facility referred to as Greenland Energy Center (GEC). GEC will be built in two phases. The initial phase will be the construction of two natural gas-fired simple cycle combustion turbine (CT) units that are proposed to be operational by June 2011. This permit authorizes the construction of the initial phase. The second phase will convert these simple cycle units to a combined cycle combustion turbine ("2-on 1" configuration). Heat recovery equipment will be installed on the two simple cycle combustion turbines to capture enough heat energy to run a steam turbine (ST). This second phase is proposed to be operational in June 2013. A new PSD construction permit application has been submitted by the applicant for the second phase.

PROJECT DESCRIPTION

This project is for the construction of two General Electric PG7241FA simple cycle combustion turbine (CT) electrical generators (Units 1 and 2) with a nominal output of 352 MW on natural gas and 380 MW on ultra low sulfur fuel oil (ULSFO); equipped with dry low-NO_x (DLN) combustors system for nitrogen oxides (NO_x) reduction while burning gas and water injection while burning ULSFO. The project also includes the installation of two 1.875 million gallon, one 2,500 gallon and one 500 gallon ULSFO storage tanks, an emergency diesel fired pump, a natural gas fired process heater and an emergency generator.

Two operating scenarios are proposed that correspond to the availability of natural gas fuel onsite. Under the first scenario (Scenario 1 – Pre-Onsite Natural Gas Availability), natural gas is not available and the CT will burn ULSFO (0.0015% sulfur by weight) exclusively. The applicant requests the operation to be limited to combined ULSFO usage of 30,213 thousand gallons per year (kgal/yr), equivalent to 1,000 hours of full load ULSFO firing per year per CT. When the natural gas pipeline construction is complete (Scenario 2 – Post Onsite Natural Gas Availability) and natural gas fuel is available onsite (by January 1, 2011), JEA proposes to fire each CT 3,500 hours per year on natural gas with up to 500 hours per year of that total on ULSFO (0.0015% sulfur by weight) and the balance on natural gas.

NEW EMISSION UNITS

This permit authorizes construction and installation of the following new regulated emission units:

ID	Emission Unit (EU) Description
001	Unit 1 – General Electric PG7241FA gas turbine electrical generator.
002	Unit 2 – General Electric PG7241FA gas turbine electrical generator.

This permit also authorizes construction and installation of the following emission units which are exempt from construction permitting requirements but certain new source performance standards may still apply. These emission units will be included in the Title V Operating Permit:

ID	EU Description
003	Two 1.8 million gallon, one 2,500 gallon and one 500 gallon distillate fuel oil storage tanks. This is an exempt emission unit as explained in the technical evaluation.
004	1,500 kilowatt (kW) Emergency Diesel Engine Generator and 350 brake horse power (bhp) Emergency Diesel Fire Pump. This is an exempt emission unit as explained in the technical evaluation.
005	5.84 Million British Thermal Unit per hour (MMBtu/hr) Natural Gas Fired Fuel Gas Heater. This is an exempt emission unit as explained in the technical evaluation.

SECTION I - GENERAL INFORMATION

REGULATORY CLASSIFICATION

Title I, Part C, Clean Air Act (CAA): The facility will be a PSD-major facility pursuant to Rule 62-212, F.A.C.

Title I, Section 111, CAA: Units 1 and 2 will be subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60, Subpart KKKK (Standards of Performance for Stationary Combustion Turbines).

Title I, Section 111, CAA: EU 004 (Emergency Diesel Engine and Emergency Diesel Fire Pump) will be subject to the manufacturer's certification requirements of compliance under 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).

Title I, Section 112, CAA: The facility will not be a "Major Source" of hazardous air pollutants (HAP), therefore compliance under 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (NESHAP) will not apply.

Title IV, CAA: Units 1 and 2 will be subject to the Acid Rain provisions of the Clean Air Act.

Title V, CAA: The facility will be Title V or "Major Source of air pollution" in accordance with Chapter 62-213, F.A.C. because the potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter/particulate matter less than 10 microns (PM/PM₁₀), sulfur dioxide (SO₂), sulfuric acid mist (SAM), and volatile organic compounds (VOC).

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A	Citation Formats and Glossary of Common Terms
Appendix B	General Conditions
Appendix C	Common Conditions
Appendix D	Common Testing Requirements
Appendix E	Summary of Best Available Control Technology Determinations
Appendix F	NSPS Subpart A, General Provisions
Appendix G	NSPS Subpart KKKK Requirements for Stationary Combustion Turbines

RELEVANT DOCUMENTS:

The permit request and additional information received to make it complete are not a part of this permit; however, the information is listed in the technical evaluation which is issued concurrently with this permit.

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications should be submitted to the City of Jacksonville Environmental Resource Management Department, Environmental Quality Division (EQD), 117 West Duval Street, Suite 225, Jacksonville, Florida 32202 and a copy to the DEP Northeast District, 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256.
3. General Conditions: The permittee shall operate under the attached General Conditions listed in Appendix B of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the F.S. [Rule 62-4.160, F.A.C.]
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the F.S.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297 of the F.A.C.; and the Title 40, Parts 51, 52, 60, 63, 72, 73 and 75 of the CFR, adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. Construction and Expiration: Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1) and 62-212.400(12), F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Source Obligation.
 - a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

SECTION II. ADMINISTRATIVE REQUIREMENTS

- b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

8. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. This permit authorizes construction of the referenced facilities.
[Chapters 62-210 and 62-212, F.A.C.]
9. **Application for Title IV Permit:** At least 24 months before the date on which the new unit begins serving an electrical generator greater than 25 MW, the permittee shall submit an application for a Title IV Acid Rain Permit to the Department's Bureau of Air Regulation in Tallahassee and a copy to the Region 4 Office of the U.S. Environmental Protection Agency in Atlanta, Georgia. This permit does not specify the Acid Rain program requirements. These will be included in the Title V air operation permit. [40 CFR 72]
10. **Title V Permit:** This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emission units. The permittee shall apply for and obtain a Title V operation permit in accordance with Rule 62-213.420, F.A.C. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation and a copy to the Compliance Authority.
[Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS
Unit 1 and 2 Simple Cycle Combustion Turbines (EU 001 and 002)

The specific conditions of this subsection apply to the following emissions unit after construction is complete.

ID	Emission Unit Description
001	Unit 1 – General Electric (GE) PG7241 FA gas turbine electrical generator
002	Unit 2 – GE PG7241 FA gas turbine electrical generator

APPLICABLE STANDARDS AND REGULATIONS

1. **BACT Determinations:** Units 1 and 2 are subject to determinations of the Best Available Control Technology (BACT) for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter/particulate matter less than 10 microns (PM/PM₁₀) and sulfuric acid mist (SAM). [Rule 62-210.200 (BACT), F.A.C.]
2. **NSPS Requirements:** The combustion turbines shall comply with the applicable New Source Performance Standards (NSPS) in 40 CFR 60, including: Subpart A (General Provisions) and Subpart KKKK (Standards of Performance for Stationary Combustion Turbines for which Construction is Commenced after February 18, 2005). See Appendix F for the NSPS Subpart A provisions and Appendix G for the NSPS Subpart KKKK provisions. The BACT emissions standards for NO_x and the fuel sulfur specifications for SO₂ are as stringent as, or more stringent than the NO_x and SO₂ limits imposed by the applicable NSPS provisions. Some separate reporting and monitoring may be required by the individual subparts. [Rule 62-204.800(7)(b), F.A.C. and 40 CFR 60, Subparts A and KKKK]

EQUIPMENT DESCRIPTION

3. **Combustion Turbine:** The permittee is authorized to install, tune, operate, and maintain two GE Model PG7241FA gas turbine-electrical generator set with a nominal generating capacity of 176 MW each while firing natural gas and 190 MW each while firing ultra low sulfur fuel oil (ULSFO). The combustion turbines will be equipped with GE's DLN combustor; Mark VI automated combustion turbine control system, and an inlet air filtration system. The combustion turbines will be designed for operation in simple cycle mode and will have dual-fuel capability. [Application and Design]

CONTROL TECHNOLOGY

4. **DLN Combustion:** The permittee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_x emissions from the combustion turbine when firing natural gas. Prior to the initial emissions performance tests required for the gas turbine when firing natural gas, the DLN combustors and automated gas turbine control system shall be tuned to achieve the permitted levels for CO and NO_x. Thereafter, the system shall be maintained and tuned in accordance with the manufacturer's recommendations or determined best practices. [Design and Rule 62-212.400(10)(BACT), F.A.C.]
5. **Wet Injection:** The permittee shall install, operate, and maintain a water injection system to reduce NO_x emissions from the combustion turbine when firing ULSFO. Prior to the initial emissions performance tests when firing ULSFO, the water injection system shall be tuned to achieve the permitted NO_x emissions standard. Thereafter, the system shall be maintained and tuned in accordance with the manufacturer's recommendations or determined best practices. [Applicant request and Rule 62-212.400(10)(BACT), F.A.C.]

PERFORMANCE REQUIREMENTS

6. **Hours of Operation (Pre-onsite natural gas availability):** The two combustion turbines are limited to a combined ULSFO usage of 30,213 thousand gallons per year. Each combustion turbine shall not operate more than 17 hours on ULSFO per calendar day for compliance with regional haze impact thresholds. The fuel usage shall be monitored with fuel meters.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

Unit 1 and 2 Simple Cycle Combustion Turbines (EU 001 and 002)

{Permitting Note: The fuel usage of 30,213 thousand gallons per year for the two turbines combined is equivalent to 1000 hours of operation per year per turbine.}

[Rule 62-210.200(PTE and BACT) F.A.C.; Rule 62-212.400(PSD), F.A.C. and Applicant Request]

7. Hours of Operation (Post-onsite natural gas availability): Each combustion turbine shall not operate more than 3,500 hours during any consecutive 12 months of which 500 hours may be on ULSFO. Each combustion turbine shall not operate more than 17 hours exclusively on ULSFO per calendar day, or with a combination of ULSFO burning of 12 hours with 12 hours of natural gas for compliance with regional haze impact thresholds.

[Rule 62-210.200(PTE and BACT) F.A.C.; Rule 62-212.400(PSD), F.A.C. and Applicant Request]

8. Permitted Capacity: The nominal heat input rate to the combustion turbine is 1,806 MMBtu per hour when firing natural gas and 1,994 MMBtu per hour when firing fuel oil (based on a compressor inlet air temperature of 59° F, the higher heating value (HHV) of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

[Rule 62-210.200(PTE), F.A.C.]

9. Authorized Fuels (Pre-onsite natural gas availability): Each combustion turbine shall fire ULSFO which shall contain no more than 0.0015% sulfur by weight as the primary fuel until natural gas is available at the facility. If natural gas is not available by June 1, 2011, the permittee shall submit to the Department and EQD semi-annual status reports on the availability of natural gas to the facility. The first status report shall be submitted by June 1, 2011. The status reports shall be submitted until natural gas is available at the facility.

{Permitting Note: The applicant has indicated that the targeted date for completion of natural gas pipeline infrastructure and commencement of gas transportation service is approximately January 1, 2011.}

[Rules 62-210.200(PTE and BACT) and 62-212.400(PSD), F.A.C.]

10. Authorized Fuels (Post-onsite natural gas availability): Each combustion turbine shall fire natural gas as the primary fuel, which shall contain no more than 2 grains of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, the combustion turbine may fire ULSFO containing no more than 0.0015% sulfur by weight.

[Rules 62-210.200(PTE and BACT) and 62-212.400(PSD), F.A.C.]

11. Simple Cycle, Intermittent Operation: The combustion turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD applicability and BACT determinations and resulted in the emission standards specified in this permit. For any request to convert these units to combined cycle operation by installing/connecting to heat recovery steam generators, including changes to the fuel quality or quantity related to combined cycle conversion which may cause an increase in short or long-term emissions, the permittee shall submit a full PSD permit application complete with a new proposal of the Best Available Control Technology as if the units had never been built.

[Rules 62-212.400(12) and 62-212.400(BACT), F.A.C.]

EMISSIONS AND TESTING REQUIREMENTS

12. Emission Standards: Emissions from the combustion turbine shall not exceed the following standards.

Pollutant	Emission Standard^e	Averaging Time	Compliance Method	Basis
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SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS
Unit 1 and 2 Simple Cycle Combustion Turbines (EU 001 and 002)

Pollutant	Emission Standard ^e	Averaging Time	Compliance Method	Basis
NO _x ^a (Gas)	9.0 ppmvd @ 15% O ₂	24-hr block	CEMS	BACT
	58.5 lb/hr ^g	3 1-hr runs	Stack Test None	<u>Equivalent</u>
NO _x ^a (Oil)	42.0 ppmvd @ 15% O ₂	4-hr rolling average ^f	CEMS	NSPS
	329.4 lb/hr ^g	3 1-hr runs	Stack Test None	<u>Equivalent</u>
CO ^b (Gas)	4.1 ppmvd @ 15% O ₂	24-hr block	CEMS	BACT
	16.2 lb/hr ^g	3 1-hr runs	Stack Test None	<u>Equivalent</u>
CO ^b (Oil)	8.0 ppmvd @ 15% O ₂	24-hr block	CEMS	BACT
	38.2 lb/hr ^g	3 1-hr runs	Stack Test None	<u>Equivalent</u>
PM/PM ₁₀ ^c	10 % Opacity	6-minute block	Visible Emissions Test	BACT
	2 gr S/100 SCF of gas/ 0.0015% S fuel oil	N/A	Record Keeping	
SAM/SO ₂ ^d	2 gr S/100 SCF of gas/ 0.0015% S fuel oil	N/A	Record Keeping	BACT

- a. Continuous compliance with the 24-hour block and 4-hour rolling average NO_x standards shall be demonstrated based on data collected by the required Continuous Emissions Monitoring System (CEMS). The initial ~~and annual~~ EPA Method 7E or Method 20 tests associated with demonstration of compliance with 40 CFR 60, Subpart KKKK or certification of the CEMS instruments may also be used to demonstrate compliance with the individual standards for natural gas and ULSFO during the time of those tests. NO_x mass emission rates are at International Organization for Standardization (ISO) conditions and are defined as oxides of nitrogen expressed as NO₂.
- b. Continuous compliance with the 24-hour CO standards shall be demonstrated based on data collected by the required CEMS. The initial ~~and annual~~ EPA Method 10 tests associated with the certification of the CEMS instruments may also be used to demonstrate compliance with the individual standards for natural gas and ULSFO. CO mass emission rates are at ISO conditions.
- c. The sulfur fuel specification combined with the efficient combustion design and operation of the gas turbine represents BACT for PM/PM₁₀ emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications 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 SAM and SO₂ from the gas turbines and represents BACT for these pollutants. Compliance with the fuel sulfur specifications shall be determined by the ASTM methods or a certified fuel sulfur analysis from the fuel vendor for determination of fuel sulfur as detailed in the draft permit.
- e. The mass emission rate standards are based on a turbine inlet condition of 59 °F, evaporative cooling on, and using the HHV of the fuel. Mass emission rate may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.
- f. 40 CFR 60, NSPS-Subpart KKKK as described in 60.4380(b)(1).
- g. For informational purposes.

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{Permitting Note: In combination with the annual restriction on hours of operation, the above emissions standards effectively limit annual potential emissions from the combustion turbines to: 340.2 tons/year of NO_x, 67.7 tons/year of CO, 71 tons/year of PM/PM₁₀ and 28.81 tons/year of SO₂.}

[Rules 62-4.070(3), 62-210.200 (BACT), 62-212.400(PSD), F.A.C. and 40 CFR 60, Subpart KKKK]

- 13. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering, confining, or applying water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
- 14. **Test Methods:** Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
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
20	Determination of NO _x , SO ₂ , and Diluent Emissions from Stationary Combustion Turbines

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 62-297.620, F.A.C. [Rule 62-204.800, F.A.C. and 40 CFR 60, Appendix A]

- 15. **Testing Requirements:** Initial tests shall be conducted between 90% and 100% of permitted capacity; adjusted as appropriate, and at prevailing ambient conditions; otherwise, this permit shall be modified to reflect the true maximum capacity as constructed. Tests shall be conducted for each pollutant while firing each fuel in the CT. For each run during tests for visible emissions, emissions of CO recorded by the CEMS shall also be reported. ~~Data collected from the reference method during the required CEMS quality assurance relative accuracy test audit (RATA) tests may substitute for annual compliance tests for NO_x and CO, provided the owner or operator indicates this intent in the submitted test protocol, and obtains approval prior to testing.~~ The relative accuracy test audit (RATA) tests shall be conducted while the affected facility is operating at more than 50 percent of normal load. ~~The mass emission rate standards are based on a turbine inlet condition of 59° F and 100 percent full load operation.~~ Combustion turbine capacity and mass emission rate may be adjusted from actual test conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-297.310(7)(a), F.A.C.; 40 CFR 60.8 and 40 CFR 60 Appendix B, Spec.2]

- 16(a) **Initial Compliance Demonstration(onsite natural gas availability on startup):** Initial compliance stack tests while firing natural gas shall be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after the first firing on natural gas. This testing must be completed within the required fuel use of Condition 7. Initial testing on ULSFO shall be conducted within 60 days after achieving maximum production, but not later than 180 days after the first firing on ULSFO. This testing must be completed within the required fuel use of Condition 7. In accordance with the test methods specified in this permit, the combustion turbine shall be tested to demonstrate initial compliance with the emission standards for NO_x, CO and with the visible emissions standard. The permittee shall provide the Compliance Authority with any other initial emissions performance tests conducted to satisfy vendor guarantees. [Rules 62-4.070, 62-297.310(7)(a), F.A.C. and 40 CFR 60.8]

{Permitting Note: The applicant has indicated that the targeted date for completion of natural gas pipeline infrastructure and commencement of gas transportation service is approximately January 1, 2011. Initial start up of the CT will be on natural gas or ULSFO.}

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- 16(b) Initial Compliance Demonstration (onsite natural gas non-availability on startup): Initial compliance stack tests while firing ULSFO shall be conducted within 60 days after achieving maximum production, but not later than 180 days after the first firing on ULSFO. This testing must be completed within the required fuel use of Condition 6. Initial testing on natural gas shall be conducted within 60 days after achieving maximum production rate, but not later than 180 days of first firing on natural gas. This testing must be completed within the required fuel use of Condition 7. In accordance with the test methods specified in this permit, the combustion turbine shall be tested to demonstrate initial compliance with the emission standards for NO_x, CO and with the visible emissions standard. The permittee shall provide the Compliance Authority with any other initial emissions performance tests conducted to satisfy vendor guarantees. [Rules 62-4.070, 62-297.310(7)(a), F.A.C. and 40 CFR 60.8]
{Permitting Note: The applicant has indicated that the targeted date for completion of natural gas pipeline infrastructure and commencement of gas transportation service is approximately January 1, 2011. Initial start up of the CT will be on ULSFO.}
17. Subsequent Compliance Testing: Annual compliance tests for NO_x, CO (~~done in conjunction with RATA tests~~) and visible emissions shall be conducted during each federal fiscal year (October 1st to September 30th). ~~If normal operation on fuel oil is less than 400 hours per calendar year, then subsequent compliance testing on fuel oil is not required for that year. If normal operation on fuel oil exceeds 400 hours per year, the Department shall require compliance testing for NO_x, CO (done in conjunction with RATA tests) and visible emissions shall be conducted while firing natural gas. Visible emissions tests shall also be performed while firing fuel oil if fuel oil was fired for more than 400 hours during the federal fiscal year.~~ [Rules 62-4.070, 62-210.200(BACT) and 62-297.310(7)(a)4, F.A.C.]
18. Continuous Compliance: The permittee shall demonstrate continuous compliance with the 24-hour block average CO emissions standards; and with the 24-hour block and 4-hour rolling average NO_x emission standards based on data collected by the certified CEMS. Within 45 days of conducting any RATA on a CEMS, the permittee shall submit a report to the Compliance Authority summarizing results of the RATA. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of particulate matter.
[Rules 62-4.070 and 62-210.200 (BACT), F.A.C.]
19. Special Compliance Tests: 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.]

EXCESS EMISSIONS

{Permitting Note: The following conditions apply only to the State Implementation Plan (SIP)-based emissions standards specified in Condition No. 12 of this subsection. Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS, NESHAP, or Acid Rain programs.}

20. Definitions:

- a. *Startup* is defined as 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. *Shutdown* is the cessation of the operation of an emissions unit for any purpose.
- c. *Malfunction* is defined as 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.

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{Permitting Note: The applicant has described startup of this unit as the period from 0 to just less than 50% load, and shutdown as the period beginning at just less than 50 % load to no load operation.}

[Rule 62-210.200(165, 242, and 258), F.A.C.]

21. **Excess Emissions Prohibited:** 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. [Rule 62-210.700(4), F.A.C.]
22. **Data Exclusion Procedures for SIP Compliance:** As per the procedures in this condition, limited amounts of CEMS emissions data, as specified in condition 23 and 27 may be excluded from the corresponding SIP-based compliance demonstration, provided that best operational practices to minimize emissions are adhered to, the duration of data excluded is minimized, and the procedures for data exclusion listed below are followed. As provided by the authority in Rule 62-210.700(5), F.A.C., these conditions replace the provisions in Rule 62-210.700(1), F.A.C.
 - a. **Limiting Data Exclusion:** If the compliance calculation using all valid CEMS emission data indicates that the emission unit is in compliance, then no CEMS data shall be excluded from the compliance demonstration.
 - b. **Event Driven Exclusion:** There must be an underlying event (startup, shutdown, malfunction, or fuel switching) in order to exclude data. If there is no underlying event, then no data may be excluded.
 - c. **Continuous Exclusion:** Data shall be excluded on a continuous basis for an underlying event. Data from discontinuous periods shall not be excluded for the same underlying event.

[Rule 62-210.700 F.A.C.]

23. **Allowable Data Exclusions:** The following data may be excluded from the corresponding SIP-based compliance demonstration for each of the events listed below in accordance with the Data Exclusion Procedures of condition 22:
 - a. **Startup:** Up to 30 minutes of CEMS data may be excluded for each combustion turbine startup. For startups of less than 30 minutes in duration, only those minutes attributable to startup may be excluded.
 - b. **Shutdown:** Up to 30 minutes of CEMS data may be excluded for each combustion turbine shutdown. For shutdowns of less than 30 minutes in duration, only those minutes attributable to shutdown may be excluded.
 - c. **Malfunction:** Up to two hours (in any operating day) of CEMS data may be excluded due to a documented malfunction. A “documented malfunction” means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic email.
 - d. **DLN Tuning:** CEMS data collected during initial or other major DLN tuning sessions may be excluded from the compliance demonstrations provided the tuning session is performed in accordance with the manufacturer’s specifications or determined best practices. A “major tuning session” would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least one (1) day that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail. [Design and Rule 62-4.070(3), F.A.C.]
 - e. **Fuel Switching:** Up to 60 minutes of CEMS data may be excluded for each fuel switch. For fuel switches of less than 60 minutes in duration, only those minutes attributable to fuel switching may be excluded.

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All valid emissions data (including data collected during startup, shutdown, malfunction, DLN tuning, and fuel switching) shall be used to report emissions for the Annual Operating Report.

[Rules 62-210.200(BACT), 62-210.370 and 62-210.700, F.A.C.]

24. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate non-compliance for a given averaging period. 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. The notice may be by telephone, facsimile transmittal, or electronic mail. [Rule 62-4.070, F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

25. CEM Systems: Subject to the following, the permittee shall install, calibrate, operate, and maintain a continuous emission monitoring system (CEMS) to measure and record the emissions of NO_x and CO from the combustion turbine in terms of the applicable standards. The monitoring system shall be installed, and functioning within the required performance specifications by the time of the initial compliance demonstration.
- a. *NO_x Monitor*: Each NO_x monitor shall be certified pursuant to the specifications of 40 CFR 75. Quality assurance procedures shall conform to the requirements of 40 CFR 75. The annual and required RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.
- b. *CO Monitor*: The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A within 60 calendar days of achieving permitted capacity as defined in Rule 62-297.310(2), F.A.C., but no later than 180 calendar days after initial startup. Quality assurance procedures 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 tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
- c. *Diluent Monitor*: The oxygen (O₂) or carbon dioxide (CO₂) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO₂ monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Rules 62-4.070(3), 62-210.200(BACT), F.A.C., 40 CFR 60 and 40 CFR 75]

26. Moisture Correction: If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]
27. CEMS Data Requirements for BACT Standards:
- a. *Data Collection*: Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system 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, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load, and use these typical values in an algorithm to enable correction of the

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monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be expressed as ppmvd corrected to 15% oxygen. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO_x as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Upon request by the Department, the CEMS emissions rates shall be corrected to ISO conditions.

- b. *Valid Hour*: Hourly average values shall begin at the top of each hour. Each hourly average value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, the hourly average value is not valid. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly average values.
- c. *24-hour Block Averages*: A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of all available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, the missing data substitution methodology of 40 CFR Part 75, Subpart D, shall not be utilized. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. [Rule 62-212.400(BACT), F.A.C.]
- d. *4-hour Rolling Average*: Compliance with this rolling average is as described in 40 CFR 60.4380(b)(1).
- e. *Data Exclusion*: Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction and DLN tuning. Some of the CEMS emissions data recorded during these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of Condition Nos. 22 and 23 of this section. All periods of data excluded shall be consecutive for each such episode and only data obtained during the described episodes (startup, shutdown, malfunction, DLN tuning) may be used for the appropriate exclusion periods. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable. Data recorded during such episodes 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 during such episodes.
- f. *Availability*: Monitor availability for the CEMS shall be based on performance standards as set forth in 40 CFR 75.

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

CEMS REQUIREMENTS FOR ANNUAL EMISSIONS

- 28. CEMS Annual Emissions Requirement: The owner or operator shall use data from the NO_x and CO CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rule 62-210.370(3), F.A.C. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit. [Rules 62-210.200 and 62-210.370(3), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

- 29. Monitoring of Capacity: The permittee shall monitor and record the operating rate of the combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown, malfunction, DLN tuning, and fuel switching). Such monitoring shall be

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made by monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]

30. 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 the combustion turbine for the previous month of operation: fuel consumption, hours of operation on each fuel, 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. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]
31. Fuel Sulfur Records: The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.
- a. *Natural Gas Sulfur Limit*: 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 ASTM methods D4084-82, D4468-85, D5504-01, D6228-98 and D6667-01, D3246-81 or more recent versions.
- b. *Distillate Fuel Oil Sulfur Limit*: Compliance with the distillate fuel oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM methods D5453-00, D129-91, D1552-90, D2622-94, or D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. At the request of the Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content.

The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

32. 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 of this permit. [Rule 62-297.310(8), F.A.C.]
33. 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 (1) 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.
- b. *SIP Quarterly Report*: Within 30 days following the end of each calendar-quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of NO_x emissions in excess of the BACT permit standard 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 NO_x CEMS system monitor availability for the previous quarter.
- c. *NSPS Reporting*: Within 30 days following the calendar semi-annual period, the permittee shall submit the written reports required by 40 CFR 60 Subpart KKKK (Standards of Performance for Stationary Combustion Turbines) for the previous semi-annual period to the Compliance Authority.

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{Note: If there are no periods of excess emissions as defined in 40 CFR, Part 60, Subpart KKKK, a statement to that effect may be submitted with the SIP Quarterly Report to suffice for the NSPS Semi-Annual Report.}

[Rules 62-4.130, 62-204.800, 62-210.700(6) and 62-212.400(BACT), F.A.C. and 40 CFR 60.7 and 60.4375]

34. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating hours and emissions from this facility in accordance with Rule 62-210.370, F.A.C. Annual operating reports shall be submitted to the Compliance Authority as required by Rule 62-210.370(3)(c), F.A.C. [Rule 62-210.370(3), F.A.C.]