# Florida Municipal Power Agency
# Stock Island Power Plant

## Facility ID No. 0870003
## Monroe County

## Final Title V Air Operation Permit Revision

Permit No. 0870003-016-AV
(2nd Revision of Title V Air Operation Permit No. 0870003-011-AV)

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# Title V Air Operation Permit Revision

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Permit No. 0870003-016-AV
Stock Island Power Plant
Facility ID No. 0870003
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility to incorporate the requirements of 40 CFR 63, Subpart ZZZZ, which will be applicable to emissions units 005 and 006 on May 3, 2013. The existing Stock Island Power Plant is located in Monroe County at 6900 Front Street, Stock Island, Florida. UTM Coordinates are: Zone 17, 425.65 East; and 2716.67 North. Latitude is: 24° 33′ 49” North; and, Longitude is: 81° 44′ 3” West.

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.

0870003-011-AV Effective Date: January 1, 2010
0870003-014-AV Effective Date: June 15, 2012
0870003-016-AV Effective Date: February 25, 2013
Renewal Application Due Date: May 20, 2014
Expiration Date: December 31, 2014

*for* Jeffery F. Koerner, Program Administrator
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JFK/sa/tbc

**Subsection A. Facility Description.**

This facility consists of eight regulated emission units: a diesel peaking unit, a black start diesel engine, two regulated diesel generators and four simple cycle combustion turbines. The total generating capacity of these units is 130.89 megawatts (MW). To reduce pollution, a combination of control techniques is used including water injection, ignition timing retardation, and low sulfur fuel oil. A selective catalytic reduction (SCR) unit must be installed to help control its $NO_X$ emissions when the operational hours of the 48 MW simple cycle combustion turbine (EU011) exceeds 2,500 hours, based on a 12 month rolling total.

This facility has an existing compression ignition (CI) engine (diesel peaking unit #2 (EU003)) which was reconstructed in 2010. The reconstructed compression ignition reciprocating internal combustion engine (RICE) driven generator is a regulated emission unit subject to 40 CFR 63 Subpart ZZZZ. Per 63.6590(c), the requirements of Subpart ZZZZ are satisfied by meeting the requirements of 40 CFR 60 Subpart IIII and 40 CFR 80. There are also three other compression ignition RICE (EU Nos. 005, 006 and 014) that are subject to 40 CFR 63 Subpart ZZZZ.

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

The Ralph Garcia Steam Plant (previously designated as E.U. ID No. 001) was removed from the facility in 2005.

**Subsection B. Summary of Emissions Units.**

| EU No. | Brief Description |
|---|---|
| *Regulated Emissions Units* | |
| 003 | EP2 Diesel Peaking Unit #2 (2,250 kW/3070 HP; 10.6 L/cylinder) - originally built in 1964; reconstructed in 2010. |
| 005 | 8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID D-1] |
| 006 | 8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID D-2] |
| 007 | 23.5 MW Simple Cycle Combustion Turbine [CT-1] |
| 008 | 19.77 MW Simple Cycle Combustion Turbine [CT-2] |
| 009 | 19.77 MW Simple Cycle Combustion Turbine [CT-3] |
| 011 | 48.00 MW Simple Cycle Combustion Turbine [CT-4] |
| 014 | Detroit Diesel, Diesel Fired Black Start Engine |
| *Unregulated Emissions Units and Activities* | |
| 010 | Unregulated Emissions Units (Fuel Storage Tanks – see Appendix U) |

**Subsection C. Applicable Regulations.**

Based on the Title V air operation permit renewal application received May 15, 2009, this facility is not a major source of hazardous air pollutants (HAP). The facility has reconstructed one of the previously existing three stationary reciprocating internal combustion engines (RICE) and it is subject to the regulations of 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII. The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

| Regulation | EU No(s). |
|---|---|
| 40 CFR 60, Subpart A, NSPS General Provisions | 003, 007, 008, 009, 011 |
| 40 CFR 60, Subpart GG, NSPS for Stationary Gas Turbines | 007, 008, 009, 011 |
| 40 CFR 63, Subpart A, General Provisions | 005, 006, 014 |
| 40 CFR 63, Subpart ZZZZ, NESHAP For Stationary Reciprocating Internal Combustion Engines | 003, 005, 006, 014 |
| 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | 003 |
| 40 CFR 80, Regulation of Fuels and Fuel Additives | 003 |
| 40 CFR 94, Control of Emissions from Marine Compression-Ignition Engines | 003 |
| 40 CFR 75 Acid Rain Monitoring Provisions | 011 |
| Rule 62-296.470, F.A.C. Clean Air Interstate Rule | 011 |

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

**FW1.** Appendices. 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.** Objectionable Odor Prohibited. 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.** General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. 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.** General Visible Emissions. 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. Receiving delivery of fuel oil by barge rather than truck except during emergency situations;
b. Using paved surfaces for fuel delivery by truck when truck delivery is required; and
c. Watering unpaved areas on an as-needed basis.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 15, 2009]

**Annual Reports and Fees**

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

**FW6.** Annual Operating Report. 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.** Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st 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.]

**FW8.** Annual Statement of Compliance. 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). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

## Subsection A. Emissions Units 005, 006

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

| EU No. | Brief Description |
|---|---|
| 005 | 8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1] |
| 006 | 8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2] |

Emissions units 005 and 006 (EU005 and EU006) are each an 8.8 MW (nominal) electric Fairbanks Morse compression ignition reciprocating internal combustion engine (RICE) driven generator (Model PC-2.6V). Sulfur dioxide ($SO_2$) emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.0015% by weight. Nitrogen oxides ($NO_X$) emissions are controlled by ignition timing retardation and by limiting the hours of operation. Visible emissions (VE) and $NO_X$ emissions are continuously monitored. Each EU005 and EU006 has a stack height of 100 feet with an exit diameter of 4 feet, exit temperature of 600° F and actual volumetric flow rate of 73,000 acfm. Commercial operation commenced April 1, 1991.

{*Permitting Notes: This emissions unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated 6/5/89; Permit Nos. AC44-152197/PSD-FL-135 and AC44 221256/PSD-FL-135; and, 40 CFR 63, Subpart ZZZZ.}*

**New Equipment**

**A.1.** Emission Control Systems. FMPA shall install catalytic oxidizers on each emissions unit. An open crankcase filtration emission control system is currently installed on each emissions unit and shall be operated to reduce emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. The permittee must follow the manufacturer's specified maintenance requirements for operating and maintaining the open crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. [40 CFR 63.6625(g)(2).]

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

**A.2.** Permitted Capacity. The maximum allowable heat input rate is as follows:

| Unit No. | MMBtu/hr Heat Input | Fuel Type |
|---|---|---|
| 005 | 85.4 (606 gallons per hour) | No. 2 Fuel Oil |
| 006 | 85.4 (606 gallons per hour) | No. 2 Fuel Oil |

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C.; and, Permit No. AC44-221256/PSD-FL-135]

**A.3.** Methods of Operation. - Fuels. The only fuel that is allowed to be burned in these units is ultra low sulfur diesel fuel oil meeting the requirements of 40 CFR 80.510(b). The sulfur content of the fuel oil shall not exceed 15 parts per million (ppm). In addition, the fuel must exhibit a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [Rules 62-213.410, F.A.C., 62-213.440, F.A.C.; Permit No. AC44-221256/PSD-FL-135; 40 CFR 63.6604; 40 CFR 80.510(b).]

**A.4.** Hours of Operation. Each emission unit's hours of operation shall not exceed 1,870 full load equivalent hours (a combined total of 3,740 full load equivalent engine hours) in any 12 consecutive month period. [Rule 62-210.200(PTE), F.A.C. and Permit No. AC44 221256/PSD-FL-135]

**A.5.** Fuel Limitations. The sum total consumption of fuel oil at this facility (from both diesel generators combined) shall not exceed 2.27 million gallons in any 12 consecutive month period. [Permit No. AC44 221256/PSD-FL-135]

**A.6.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**Operating Limitations**

**A.7.** Operating Limitations.

a. Pressure drop across catalyst must not change by more than 2 inches of water at 100% load +/- 10% from the pressure drop measured during the initial performance test and must be measured once per month.
Except for startup as described below, exhaust temperature at the catalyst inlet must be greater than or equal to 450 degrees F and less than orequal to 1,350 degrees F based on a 4 hour rolling average.

The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the CO emission standard applies.

[40 CFR 63.6603(a), Table 2b-(1), 40 CFR 63.6625(h), Table 6 (10)]

**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.}*

Unless otherwise specified, the averaging times for Specific Conditions **A.8. - A.13.** are based on the specified averaging time of the applicable test method.

**A.8.** $NO_X$ Emissions. $NO_X$ emissions shall not exceed any of the following limits:

a. 160.9 pounds per hour from each engine;
b. 6.0 grams per horsepower-hour from each engine; and,
c. 300.9 tons in any consecutive 12-month period for the combined sum total from both engines.

[Permit No. AC44-221256/ PSD-FL-135]

**A.9.** $SO_2$ Emissions. $SO_2$ emissions shall not exceed either of the following limits:

a. 43.6 pounds per hour from each engine; and,
b. 81.6 tons in any consecutive 12-month period for the combined sum total from both engines.

[Permit No. AC44-221256/ PSD-FL-135]

**A.10.** $PM/PM_{10}$ Emissions. $PM/PM_{10}$ emissions shall not exceed any of the following limits:

a. 8.5 pounds per hour from each engine;
b. 0.1 pound per million Btu heat input; and,
c. 16.0 tons in any consecutive 12-month period for the combined sum total from both engines.

[Permit No. AC44-221256/ PSD-FL-135]

**A.11.** VE Emissions. VE shall not exceed 20% opacity. [Permit No. AC44-221256/ PSD-FL-135]

**A.12.** Carbon Monoxide (CO) Emissions. CO emissions shall not exceed any of the following limits:

a. 53.6 pounds per hour from each engine;
b. 2.0 grams per horsepower-hour from each engine; and,
c. 100.3 tons in any consecutive 12-month period for the combined sum total from both engines.
d. 23 ppmvd at 15% $O_2$, no later than May 3, 2013, based on the average of three 1-hour runs or reduce CO emissions by 70% or more, no later than May 3, 2013, based on the average of three 1-hour runs.

[Permit No. AC44-221256/ PSD-FL-135; 40 CFR 63.6603(a), Table 2d-(3).]

**A.13.** Volatile Organic Compounds (VOC). VOC emissions shall not exceed any of the following limits:

a. 26.8 pounds per hour from each engine;
b. 1.0 grams per horsepower-hour from each engine; and,
c. 50.1 tons in any consecutive 12-month period for the combined sum total from both engines.

[Permit No. AC44-221256/ PSD-FL-135.]

**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.14.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rules 62-210.700(1)]

**A.15.** Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

**Monitoring Requirements**

**A.16.** Monitoring System. FMPA shall install and operate a monitoring system to monitor catalyst inlet temperature and pressure drop across the catalyst. The monitoring system must comply with the requirements of 40 CFR 63.6625(b), 40 CFR 63.6640(a) through (b), and Table 6 (10). The applicant shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the requirements in 40 CFR 63.8.

a. FMPA shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs below and in 40 CFR 63.8(d). As specified in 40 CFR 63.8(f)(4), FMPA may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in this section in the site-specific monitoring plan.
   1. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
   2. Sampling interface ( *e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
   3. Equipment performance evaluations, system accuracy audits, or other audit procedures;
   4. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3); and
   5. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

b. FMPA shall install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

c. The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).

d. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

e. FMPA shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

**f.** FMPA shall conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

[40 CFR 63.6625, 40 CFR 63.6640]

**A.17.** Use of Monitoring Data. The permittee shall monitor the above operating parameters continuously at all times that the source is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must however, use all the valid data collected during all other periods. [40 CFR 63.6635]

**Continuous Monitoring Requirements**

**A.18.** Continuous Monitoring Equipment and Recordkeeping. The permittee shall calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and $NO_X$ emissions. The permittee shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in an a permanent legible form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records. [Rule 62-213.440(1)(b)2.b., F.A.C. and Permit No. AC44-221256/PSD-FL-135]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**A.19.** Test Methods. Required tests shall be performed in accordance with the following reference methods:

| Method | Description of Method and Comments |
|---|---|
| 1-4 | Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content |
| 3A | Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources |
| 5 | Determination of Particulate Emissions from Stationary Sources |
| 6 | Determination of Sulfur Dioxide Emissions from Stationary Sources |
| 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<br>{Note: The method shall be based on a continuous sampling train.} |
| 20 | Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines |
| ASTM D6348-03 | Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy |
| ASTM D6522-00 | Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers |
| ASTM D 2880-71,<br>ASTM D 6522–00 | Standard Methods by the American Society of Testing and Materials for Fuel Analysis |

| Method | Description of Method and Comments |
|---|---|
| (2005) or latest ASTM editions | |

The above 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 unless prior written approval is received from the Department. [Rules 62-297.401, and 62-297.440, F.A.C., Permit No. AC44-152197/PSD-FL-135]

**A.20.** Common Testing Requirements. 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.21.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each EU005 and EU006 shall be tested to demonstrate compliance with the emissions standards for $NO_X$, $SO_2$, VE, and PM. [Rule 62-297.310(7), F.A.C. and Permit No. AC44-152197/PSD-FL-135]

**A.22.** Compliance Tests Prior To Renewal. Compliance tests shall be performed for $NO_X$, $SO_2$, VE, PM, CO and VOC once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **A.8. – A.13.** For CO, the most recent compliance test conducted to comply with Specific Condition **A.23.** can be used for compliance with this condition. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.; and, Permit No. AC44-152197/PSD-FL-135]

**A.23.** CO Compliance Test. A compliance test to demonstrate compliance with the CO emissions limit in Specific Condition A.12.d. must be conducted no later than October 30, 2013, and subsequently every 8,760 hours or 3 years, whichever comes first. Test procedures must comply with 40 CFR 63, Subpart ZZZZ, Table 4, Table 5, and 63.6620. [40 CFR 63.6612, 40 CFR 63.6615, Table 3-(4), 40 CFR 63.6620, Table 4-(1 or 3), Table 5-(1 or 2)]

**A.24.** Testing Requirements from Table 4 of 40 CFR Part 63, Subpart ZZZZ.

| **Complying with the requirement to . . .** | **FMPA shall . . .** | **Using . . .** | **According to the following requirements . . .** |
|---|---|---|---|
| a. Reduce CO emissions | i. Measure the $O_2$at the inlet and outlet of the control device; and | (1) Portable CO and $O_2$ analyzer | (a) Using ASTM D6522-00 (2005) (incorporated by reference, see 40 CFR 63.14). Measurements to determine $O_2$ must be made at the same time as the measurements for CO concentration. FMPA may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). |
| | ii. Measure the CO at the inlet and the outlet of the control device. | (1) Portable CO and $O_2$ analyzer | (a) Using ASTM D6522-00 (2005) (incorporated by reference, see § 63.14) or Method 10 of 40 CFR Appendix A. The CO concentration must be at |

| | | | |
|---|---|---|---|
| | | | 15 percent $O_2$, dry basis. FMPA may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). FMPA may also use Method 320 of 40 CFR Part 63, appendix A, or ASTM D6348-03. |
| b. Limit the concentration of CO in the stationary RICE exhaust | i. Select the sampling port location and the number of traverse points; and | (1) Method 1 or 1A of 40 CFR Part 60, appendix A § 63.7(d)(1)(i) | (a) If using a control device, the sampling site must be located at the outlet of the control device. |
| | ii. Measure CO at the exhaust of the stationary RICE | (1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), [a]Method 320 of 40 CFR Part 63, appendix A, or ASTM D6348-03 FMPA may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). | (a) CO Concentration must be at 15 percent $O_2$, dry basis. Results of this test consist of the average of the three 1-hour longer runs. |

**A.25.** Testing Requirements from Table 5 of 40 CFR Part 63, Subpart ZZZZ.

| | | **Complying with the requirement to . . .** | **FMPA shall have demonstrated initial compliance if . . .** |
|---|---|---|---|
| | | a. Reduce CO emissions and using oxidation catalyst, and using a CPMS. | i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and<br>ii. FMPA has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and<br>iii. FMPA has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |
| | | a. Limit the concentration of CO, using oxidation catalyst, and using a | i. The average CO concentration determined from the initial |

| | | | |
|---|---|---|---|
| | | CPMS. | performance test is less than or equal to the CO emission limitation; and ii. FMPA has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b); and iii. FMPA has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test. |

**A.26.** Testing Requirements from 40 CFR 63.6620.

a. FMPA shall conduct three separate test runs for each performance test required in this section, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour. During the initial test, you must record the catalyst inlet temperature and pressure drop across the catalyst.

b. FMPA shall use Equation 1, below, to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

$C_i$ = concentration of CO at the control device inlet,

$C_o$ = concentration of CO at the control device outlet, and

R = percent reduction of CO emissions.

c. FMPA shall normalize the carbon monoxide (CO) concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide ($CO_2$). If pollutant concentrations are to be corrected to 15 percent oxygen and $CO_2$ concentration is measured in lieu of oxygen concentration measurement, a $CO_2$ correction factor is needed. Calculate the $CO_2$ correction factor as described in paragraphs below.

1. Calculate the fuel-specific $F_o$ value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

$F_o$ = Fuel factor based on the ratio of oxygen volume to the ultimate $CO_2$ volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

$F_d$ = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, $dsm^3$ /J (dscf/$10^6$ Btu).

$F_c$ = Ratio of the volume of $CO_2$ produced to the gross calorific value of the fuel from Method 19, $dsm^3$ /J (dscf/$10^6$ Btu).

2. Calculate the $CO_2$ correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

$X_{co2}$ = $CO_2$ correction factor, percent.

5.9 = 20.9 percent $O_2$ −15 percent $O_2$ , the defined $O_2$ correction value, percent.

3. Calculate the $NO_X$ and $SO_2$ gas concentrations adjusted to 15 percent $O_2$ using $CO_2$ as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$ = Measured $CO_2$ concentration measured, dry basis, percent.

**Recordkeeping and Reporting Requirements**

**A.27.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority

| Report | Reporting Deadline | Related Condition(s) |
|---|---|---|
| Operational Recordkeeping | Daily recordkeeping is required; daily reporting is not required. | **A.29.** |
| NESHAP Notifications | Initial | **A.30.** |
| NESHAP Reports | Semi-annual | **A.31.** |

[Rule 62-213.440(1)(b), F.A.C.]

**A.28.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**A.29.** Operational Recordkeeping. In order to document compliance with the hours of operation limitation of specific condition **A.4.**, the fuel oil consumption limit of specific condition **A.5.**, and the annual $NO_X$ emission limit of specific condition **A.8.**, the permittee shall keep daily records of the hours of operation, the fuel oil consumption, and the $NO_X$ emissions. The records shall indicate:

a. the daily hours of operation for each individual diesel generator;
b. the daily hours of operation expressed as full load equivalent engine hours (both units combined);
c. the daily sum total fuel oil consumption in gallons for both units combined;
d. the daily sum total $NO_X$ emissions in pounds for both units combined;
e. a cumulative total hours of operation expressed as full load equivalent engine hours for the current month;
f. a cumulative sum total fuel oil consumed in gallons for the current month;

g. a cumulative sum total $NO_X$ emissions in tons for the current month;
h. a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months;
i. a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 months; and,
j. a rolling cumulative sum total $NO_X$ emissions in tons for the previous 12 consecutive months.

[Permit No. AC44-221256/PSD-FL-135]

**A.30.** Notifications. FMPA shall provide notifications of compliance tests and compliance status in accordance with 40 CFR 63.6645. FMPA must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii).

a. For each initial compliance demonstration required in Table 5 of 40 CFR Part 63, Subpart ZZZZ that does not include a performance test, FMPA must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
b. For each initial compliance demonstration required in Table 5 of 40 CFR Part 63, Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 of 40 CFR Part 63, Subpart ZZZZ, FMPA must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2).

[40 CFR 63.6645]

**A.31.** Reporting. FMPA shall comply with the reporting and recordkeeping requirements in 40 CFR 63.6650, 63.6655 and 63.6660. [40 CFR 63.6650, 63.6655 and 63.6660]

**A.32.** Reporting Requirements from Table 7 of 40 CFR Part 63, Subpart ZZZZ.

| FMPA must submit a ... | The report must contain ... | FMPA must submit the report ... |
|---|---|---|
| Compliance report | a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or<br>b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or | Semi-annual according to the requirements in 40 CFR 63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations. |

| | | |
|---|---|---|
| | c. If you had a malfunction during the reporting period, the information in 40 CFR 63.6650(c)(4) | |

**A.33.** Reporting Requirements from 40 CFR 63.6650.

a. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.
b. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, which ever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.
c. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
d. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

**A.34.** Fuel Oil Recordkeeping. In order to document continuing compliance with the hourly $SO_2$ emission limit of Specific Condition **A.9.** and the fuel sulfur limit of Specific Condition **A.3.**, the permittee shall keep records of the sulfur content, in percent by weight, of all the fuel burned. The records shall be based upon either vendor provided as-shipped analyses or upon analyses of as-received samples. The record shall be maintained for a minimum of five years and shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2.b., F.A.C. and Permit No. AC44-221256/PSD-FL-135]

**Other Requirements**

**A.35.** NSR Applicability. If the permittee requests relaxation of any federally enforceable limits for these units, then the Department will determine whether the New Source Review (NSR) requirements of Rule 62-212.400, F.A.C. shall apply, as though the construction permit AC44-221256 had not been issued. [Permit No. AC44-221256/PSD-FL-135]

**A.36.** BACT Review. Best available control technology (BACT) will be re-evaluated if the permittee requests an increase in or exceeds the permitted hours of operation. Selective catalytic reduction for $NO_X$ control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that the permittee requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation. [Permit No. AC44-221256/ PSD-FL-135]

**A.37.** Requirements fromTable 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in § 63.6665, FMPA must comply with the following applicable general provisions.

| General provisions citation | Subject of citation |
|---|---|
| § 63.1 | General applicability of the General Provisions |
| § 63.2 | Definitions |
| § 63.3 | Units and abbreviations |
| § 63.4 | Prohibited activities and circumvention |
| § 63.5 | Construction and reconstruction |
| § 63.6(a) | Applicability |
| § 63.6(c)(1)-(2) | Compliance dates for existing sources |
| § 63.6(f)(2) | Methods for determining compliance |
| § 63.6(f)(3) | Finding of compliance |
| § 63.6(i) | Compliance extension procedures and criteria |
| § 63.7(a)(1)-(2) | Performance test dates |
| § 63.7(a)(3) | CAA section 114 authority |
| § 63.7(b)(1) | Notification of performance test |
| § 63.7(b)(2) | Notification of rescheduling |
| § 63.7(c) | Quality assurance/test plan |
| § 63.7(d) | Testing facilities |
| § 63.7(e)(2) | Conduct of performance tests and reduction of data |
| § 63.7(e)(3) | Test run duration |
| § 63.7(g) | Performance test data analysis, recordkeeping, and reporting |
| § 63.8(a)(1) | Applicability of monitoring requirements |
| § 63.8(a)(2) | Performance specifications |
| § 63.8(b)(1) | Monitoring |
| § 63.8(c)(1) | Monitoring system operation and maintenance |
| § 63.8(c)(1)(i) | Routine and predictable SSM |
| § 63.8(c)(1)(ii) | SSM not in Startup Shutdown Malfunction Plan |
| § 63.8(c)(1)(iii) | Compliance with operation and maintenance requirements |
| § 63.8(c)(2)-(3) | Monitoring system installation |
| § 63.8(c)(4) | Continuous monitoring system (CMS) requirements |
| § 63.8(c)(6)-(8) | CMS requirements |
| § 63.8(d) | CMS quality control |
| § 63.8(e) | CMS performance evaluation |
| § 63.8(g) | Data reduction |
| § 63.9(a) | Applicability and State delegation of notification requirements |
| § 63.9(b)(1)-(5) | Initial notifications |
| § 63.9(d) | Notification of special compliance requirements for new sources |
| § 63.9(e) | Notification of performance test |
| § 63.9(g)(1) | Notification of performance evaluation |
| § 63.9(h)(1)-(6) | Notification of compliance status |
| § 63.9(j) | Change in previous information |
| § 63.10(a) | Administrative provisions for recordkeeping/reporting |
| § 63.10(b)(1) | Record retention |
| § 63.10(b)(2)(vi)-(xi) | Records |
| § 63.10(b)(2)(xiv) | Records of supporting documentation |
| § 63.10(b)(3) | Records of applicability determination |
| § 63.10(d)(1) | General reporting requirements |
| § 63.10(d)(2) | Report of performance test results |

| General provisions citation | Subject of citation |
|---|---|
| § 63.10(d)(4) | Progress reports |
| § 63.10(e)(1) and (2)(i) | Additional CMS Reports |
| § 63.10(e)(3) | Excess emission and parameter exceedences reports |
| § 63.10(f) | Waiver for recordkeeping/reporting |
| § 63.12 | State authority and delegations |
| § 63.13 | Addresses |
| § 63.14 | Incorporation by reference |
| § 63.15 | Availability of information |

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

| EU No. | Brief Description |
|---|---|
| 007 | 23.5 MW Simple Cycle Combustion Turbine [CT-1] |

Emissions unit 007 (EU007) is a General Electric (GE) Frame 5 model PG5341 combustion turbine (CT) equipped with water injection for fuel oil firing. The unit has a rated capacity of 23.5 MW at International Organization for Standardization (ISO) conditions. $NO_X$ emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. EU007 has a stack height of 35 feet with a 12.2 feet exit diameter, a 910 °F exit temperature, and 1,020,201 acfm actual volumetric flow rate. This turbine began operation January 1, 1996.

*{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; NSPS - 40 CFR 60 Subpart A; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}*

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

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

| Unit No. | MMBtu/hr Heat Input | Fuel Type |
|---|---|---|
| 007 | 312* | No. 2 fuel oil |

*at an ambient temperature of 59°F
Heat input may vary depending on ambient conditions and the CT's characteristics. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination. [Rules 62-4.160(2), 62-204.800, and 62-210.200(PTE), F.A.C.; and, Permit No. AC44-245399/PSD-FL-210]

**B.2.** Method of Operation. The only fuel to be burned in this unit is No. 2 fuel oil. The sulfur content of the fuel shall not exceed 0.05 percent by weight. [Rules 62-4.160(2), 62-213.410 and 62-213.440(1), F.A.C.; and, Permit No. AC44-245399/PSD-FL-210]

**B.3.** Hours of Operation/Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in EU007 is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load. EU007 may operate for more than 2,888.5 hours per year if operating at part-load. [Rule 62-210.200(PTE), F.A.C.; Permit No. AC44-245399/PSD-FL-210]

**B.4.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), 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.}*

Unless otherwise specified, the averaging times for Specific Conditions **B.5. – B.9**. are based on the specified averaging time of the applicable test method.

**B.5.** $NO_X$ Emissions. For each turbine, $NO_X$ emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as $NO_X$, shall not exceed:

$STD = 0.0075(14.4)/Y + F$

where:

STD = allowable $NO_X$ emissions concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = $NO_X$ emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3). F shall be defined according to the nitrogen content of the fuel as follows:

| Fuel-bound nitrogen (% by weight) | F ($NO_X$% by volume) |
|---|---|
| $N \leq 0.015$ | 0 |
| $0.015 < N \leq 0.1$ | 0.04(N) |
| $0.1 < N \leq 0.25$ | 0.004+0.0067(N-0.1) |
| $N > 0.25$ | 0.005 |

where: N = the nitrogen content of the fuel (percent by weight);

b. 75 ppmvd, based on a 1-hour average at 15% $O_2$;
c. 96 lbs/hour, based on a 1-hour average at 15% $O_2$; and,
d. 138 TPY.

[40 CFR 60.332; Permit No. AC44-245399/PSD-FL-210 and BACT dated 9/27/1995]

**B.6.** PM/$PM_{10}$ Emissions. PM/$PM_{10}$ emissions shall not exceed:
a. 18 lbs/hour, based on a 1-hour average; and,
b. 43 TPY.
[Permit No. AC44-245399/PSD-FL-210 and BACT dated 9/27/1995]

**B.7.** CO Emissions. CO emissions shall not exceed:
a. 20 ppm @ 15% $O_2$ at 100% load, and 136 ppm @ 15% $O_2$ at 50% load;
b. 64 lbs per hour, based on a 1-hour average; and,
c. 152 TPY.
[Permit No. AC44-245399/PSD-FL-210 and BACT dated 9/27/1995]

**B.8.** VE Emissions. VE shall be limited to 20 percent opacity. [Permit No. AC44-245399/PSD-FL-210]

**B.9.** $SO_2$ Emissions.
a. *BACT Limit*. $SO_2$ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight. [Permit No. AC44-245399/PSD-FL-210 and BACT dated 9/27/1995]
b. *NSPS Limit*. The owner or operator shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8,000 ppmw). [40 CFR 60.333]

**Excess Emissions**

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

**B.10.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rules 62-210.700(1), F.A.C.]

**B.11.** Excess Emissions Allowed. The permittee shall provide a general description of the procedures to be followed during periods of start up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description may be updated as needed by submitting such update to the Department within thirty days of implementation. [Permit No. AC44 245399/PSD-FL-210]

**B.12.** Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**B.13.** Excess Emissions Defined. For purposes of the reports required under this permit, excess emissions are defined as any calculated average emission rate, as determined pursuant to Specific Condition **B.10.** which exceeds the applicable emission limits in Specific Conditions **B.5.** through **B.9.** [Permit No. AC44 - 245399/PSD-FL-210]

**B.14.** NSPS Excess Emissions. The owner or operator shall define excess emissions of the NSPS standards in accordance with the regulations of 40 CFR 60.334(j). [40 CFR 60.334(j)]

**Monitoring of Operations**

**B.15.** Fuel Oil Monitoring. The No. 2 fuel oil shall be monitored for the sulfur content. The frequency of the determination shall be in accordance with the requirements of 40 CFR 60.334. Testing for sulfur content of the fuel oil in the storage tanks shall be conducted upon each occasion that fuel is transferred to the storage tanks. Testing for fuel oil lower heating value shall also be conducted on the same schedule. [Permit No. AC44 245399/PSD-FL-210 and 40 CFR 60.334]

**Continuous Monitoring Requirements**

**B.16.** Continuous Monitoring System. The permittee shall operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent. [40 CFR 60.334(a) and Permit No. AC44 245399/PSD-FL-210]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**B.17.** Test Methods. Required tests shall be performed in accordance with the following reference methods or equivalent:

| Method | Description of Method and Comments |
|---|---|
| 1 | Sample and Velocity Traverses for Stationary Sources |
| 3 | Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight |
| 3A | Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources |
| 5 | Method for Determining Particulate Matter Emissions (All PM is assumed to be $PM_{10}$.) |
| 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<br>{Note: The method shall be based on a continuous sampling train.} |
| 20 | Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines |
| ASTM | Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy – Dispersive X-ray Fluorescence Spectrometry |

| Method | Description of Method and Comments |
|---|---|
| D4294-98 | |
| ASTM D129-09, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 | Fuel Sampling Methods from the American Standards for Testing and Materials |

The above 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 unless prior written approval is received from the Department. [Rules 62-297.401 and 62-297.440, F.A.C.; 40 CFR 60.335; and, Permit No. AC44-245399/PSD-FL-210]

**B.18.** Common Testing Requirements. 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.]

**B.19.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU007 shall be tested to demonstrate compliance with the emissions standards for PM, VE, CO, $NO_X$ and $SO_2$. [Rule 62-297.310(7), F.A.C. and Permit No. AC44-245399/PSD-FL-210]

**B.20.** Compliance Tests Prior To Renewal. Compliance tests shall be performed for PM, VE, CO, $NO_X$, and $SO_2$ once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **B.5. – B.9.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

**B.21.** PM. Compliance with the PM emission limits shall be demonstrated using EPA Method 5 in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C. [Permit No. AC44-245399/PSD-FL-210]

**B.22.** VE. Compliance with the VE emission limits shall be demonstrated using EPA Method 9 in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C. [Permit No. AC44-245399/PSD-FL-210]

**B.23.** CO. Compliance with the CO emission limits shall be demonstrated using EPA Method 10 in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C. [Permit No. AC44-245399/PSD-FL-210]

**B.24.** $NO_X$. Compliance with the $NO_X$ emission limits shall be demonstrated using EPA Method 7E or 20 in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C. [Permit No. AC44-245399/PSD-FL-210]

**B.25.** $SO_2$. Compliance with the sulfur content of the fuel oil shall be demonstrated using ASTM D4294 (or equivalent). Compliance with the $SO_2$ emission limits will be demonstrated if the fuel oil analysis indicates a sulfur content of 0.05% by weight or less. [Permit No. AC44-245399/PSD-FL-210]

**Recordkeeping and Reporting Requirements**

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

| Report | Reporting Deadline | Related Condition(s) |
|---|---|---|

| | | |
|---|---|---|
| Notice of Excess Emissions | Quarterly | **B.14., B 29.** |

[40 CFR 60.334]

**B.27.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**B.28.** Fuel Oil Recordkeeping. The permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel to demonstrate compliance with the fuel oil firing heat input limitation. All records shall be maintained for a minimum of five years after the date of each record and shall be made available to the Department upon request. [Permit No. AC44-245399/PSD-FL-210]

**B.29.** Reporting of Excess Emissions and Monitoring System. The owner or operator shall submit quarterly reports of excess emissions and monitor downtime as required by 40 CFR 60.334(j) and reports of excess emissions and monitoring system performance report in accordance with 40 CFR 60.7(c). [40 CFR 60.334 and 40 CFR 60.7(c) and (d)]

**Other Requirements**

**B.30** Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines, attached to this permit as Appendix NSPS, Subpart A and Appendix NSPS, Subpart GG, respectively. [Rule 62-213.440, F.A.C.]

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

| EU No. | Brief Description |
|---|---|
| 008 | 19.77 MW Simple Cycle Combustion Turbine [CT-2] |
| 009 | 19.77 MW Simple Cycle Combustion Turbine [CT-3] |

Emissions units 008 and 009 are two refurbished General Electric (Model MS-5001R) 19.77 MW combustion turbines. Each EU008 and EU009 has a stack height of 43 feet with a 12.6 feet exit diameter, 982° F exit temperature, and a 607,567 acfm actual volumetric flow rate. EU008 (CT-2) had a startup date of June 21, 1998. EU009 (CT-3) had a startup date of August 1, 1998.

*{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subparts A (General Provisions) and GG, (Standards of Performance for Stationary Gas Turbines), adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration; and Permit No. 0870003-003-AC, issued January 8, 1998.}*

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

**C.1.** Permitted Capacity. The maximum allowable heat input rate is as follows:

| Unit No. | MMBtu/hr Heat Input | Fuel Type |
|---|---|---|
| 008 | 305 | No. 2 Fuel Oil |
| 009 | 305 | No. 2 Fuel Oil |

[Rules 62-4.160(2), 62-204.800, and 62-210.200(PTE), F.A.C.; Permit No. 0870003-003-AC.]

**C.2.** Methods of Operation. Only No. 2 fuel oil can be fired in these combustion turbines. [Rule 62-213.410, F.A.C. and Permit No. 0870003-003-AC]

**C.3.** Hours of Operation. Each emission unit is allowed to operate 4,000 hours per year. The combined operation of both units shall also be limited to 4,000 hours per year. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0870003-003-AC]

**C.4.** Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in either EU008 or EU009 is 8,840,000 gallons per year, which is equivalent to 4,000 hours per year of operation at full load. The combined fuel oil consumption for both units shall be limited to 8,840,000 gallons per year. [Permit No. 0870003-003-AC]

**C.5.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), 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.}*

Unless otherwise specified, the averaging times for Specific Conditions **C.6. – C.11.** are based on the specified averaging time of the applicable test method.

**C.6.** $NO_X$ Emissions. For each turbine, $NO_X$ emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as $NO_X$, shall not exceed:

STD = 0.0075(14.4)/Y + F

where:

STD = allowable $NO_X$ emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = $NO_X$ emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(4).

F shall be defined according to the nitrogen content of the fuel as follows:

| Fuel-bound nitrogen (% by weight) | F ($NO_X$% by volume) |
|---|---|
| $N \leq 0.015$ | 0 |
| $0.015 < N \leq 0.1$ | 0.04(N) |
| $0.1 < N \leq 0.25$ | 0.004+0.0067(N-0.1) |
| $N > 0.25$ | 0.005 |

where: N = the nitrogen content of the fuel (percent by weight);

b. 75 ppmvd, based on a 1-hour average at 15% $O_2$ (ISO standard ambient conditions);
c. 93.8 lb/hour based on a 1-hour average at 15% $O_2$; and 40° F; and,
d. 172 TPY from each turbine individually and from both turbines collectively, based on an average hourly concentration of 86 pounds per hour at 85° F ambient temperature and no more than 4,000 hours per year of operation, from either or both turbines combined.

[40 CFR 60.332(a) and (b), Permit No. 0870003-003-AC]

**C.7.** CO Emissions. For each turbine, CO shall be limited to:
a. 25.2 lb/hour, based on a 1-hour average; and,
b. 101 TPY, each turbine individually and from both turbines collectively. [Permit No. 0870003-003-AC]

**C.8.** VE Emissions. Visible emissions shall be limited to 20 percent opacity. [Permit No. 0870003-003-AC]

**C.9.** $SO_2$ Emissions.
a. *SIP Limit*. For each turbine, $SO_2$ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight. [Permit No. 0870003-003-AC]
b. *NSPS Limit*. The owner or operator shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333]

**C.10.** PM Emissions. For each turbine, PM emissions shall be limited to:
a. 16.6 lb/hour, based on a 1-hour average; and,
b. 55 TPY each turbine individually and from both turbines collectively.
[Permit No. 0870003-003-AC]

**C.11.** $PM_{10}$ Emissions. For each turbine, $PM_{10}$ emissions shall be limited to:
a. 16.6 lb/hour, based on a 1-hour average; and,
b. 45 TPY each turbine individually and from both turbines collectively.
[Permit No. 0870003-003-AC]

**Excess Emissions**

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

**C.12.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rules 62-210.700(1)]

**C.13.** Excess Emissions Prohibited: Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup,

shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348]

**C.14.** NSPS Excess Emissions. The owner or operator shall define and report excess emissions in accordance with the regulations of 40 CFR 60.334(j). [40 CFR 60.334(j)]

**Monitoring of Operations**

**C.15.** Critical Fuel Parameters. The Permittee shall monitor sulfur content, nitrogen content, and the lower heating value of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

a. If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
b. If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Bureau of Air Regulation before they can be used to comply with 40 CFR 60.334(b).

[AC44-245399/PSD-FL-210; 40 CFR 60.334(i); and, Permit No. 0870003-003-AC]

**Continuous Monitoring Requirements**

**C.16.** Continuous Monitoring System. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Department. [Permit No. 0870003-003-AC]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**C.17.** Test Methods. Required tests shall be performed in accordance with the following reference methods or equivalent:

| Method | Description of Method and Comments |
|---|---|
| 1 | Sample and Velocity Traverses for Stationary Sources |
| 3 | Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight |
| 3A | Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources |
| 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<br>{Note: The method shall be based on a continuous sampling train.} |
| 20 | Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines |
| ASTM D6522-00 | Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers |

| Method | Description of Method and Comments |
|---|---|
| ASTM D129-09, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 | Fuel Sampling Methods from the American Standards for Testing and Materials |

The above 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 unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C. and Permit No. 0870003-003-AC]

**C.18.** Common Testing Requirements. 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.]

**C.19.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each EU008 and EU009 shall be tested to demonstrate compliance with the emissions standards for $NO_X$, CO and VE. [Rule 62-297.310(7), F.A.C. and Permit No. 0870003-003-AC]

**C.20.** Compliance Tests Prior To Renewal. Compliance tests shall be performed for $NO_X$, CO, PM and VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **C.6 – C.11.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

**C.21.** $NO_X$. Compliance with the allowable emission limiting standards for $NO_X$ shall be determined by using EPA Method 7E or 20 as described in 40 CFR 60, Appendix A adopted by reference in Rule 62-204.800, F.A.C. The $NO_X$ emissions shall be determined at 30, 50, 75 and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. An annual compliance test shall be performed on the unit if operated for more than 400 hours in the preceding 12-month period. [Permit No. 0870003-003-AC]

**C.22.** CO. Compliance with the CO standard shall be demonstrate with EPA Method 10 as described in 40 CFR 60, Appendix A adopted by reference in Rule 62-204.800, F.A.C. An annual compliance test for CO shall be performed on the unit if operated for more than 400 hours in the preceding 12-month period. [Permit No. 0870003-003-AC]

**C.23.** VE. Compliance with the VE standard shall be demonstrate with EPA Method 9 as described in 40 CFR 60, Appendix A adopted by reference in Rule 62-204.800, F.A.C. [Permit No. 0870003-003-AC]

**Recordkeeping and Reporting Requirements**

**C.24.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

| Report | Reporting Deadline | Related Condition(s) |
|---|---|---|
| Notice of Excess Emissions | Quarterly | **C.14, C.27, C.28** |

**C.25.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**C.26.** Daily Records. The permittee shall maintain daily records of the following:

a. Fuel oil consumption; and

b. Operating hours.
[Permit No. 0870003-003-AC]

**C.27.** Excess Emissions Report. The permittee shall submit a quarterly excess emissions and monitoring systems performance report of the continuous monitoring system for any one-hour period during which the average water to fuel ratio falls below the water-to-fuel ratio determined to demonstrate compliance with Specific Conditions **C.6.** and **C.9.** [40 CFR 60.334(j)(1)(i)(A)]

**C.28.** Excess Emissions – Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C. and Permit No. 0870003-003-AC]

**Other Requirements**

**C.29.** Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines, attached to this permit as Appendix NSPS, Subpart A and Appendix NSPS, Subpart GG, respectively. [Rule 62-213.440, F.A.C.]

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

| EU No. | Brief Description |
|---|---|
| 011 | 48 MW Simple Cycle Combustion Turbine [CT-4] |

Emissions unit 011 (EU011) is a General Electric LM 6000 PC SPRINT Combustion Turbine-Electrical Generator with spray intercooling and water injection. It has a rated capacity of 48 MW at ISO conditions. The maximum heat input to the combustion turbine from firing No. 2 fuel oil is 434 MMBtu per hour, lower heating value (LHV), based on the following: 100% base load, lower heating value of No. 2 fuel oil, and a compressor inlet air temperature of 41° F. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. $NO_X$ emissions are controlled by a spray cooling and water injection system when operational hours are less than or equal to 2,500 hours (**described in subsection D.2 below**), based on a 12 month rolling total. If operational hours exceed 2,500 hours (**described in subsection D.3 below**) a selective catalytic reduction (SCR) system must be installed to help control $NO_X$ emissions. The water to fuel ratio is continuously monitored. EU011 has a stack height of 60 feet with a 10 feet exit diameter, 837 °F exit temperature and 566,400 acfm actual volumetric flow rate. This turbine began operation July 1, 2006.

*{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II; Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR) and Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b) 38., F.A.C.; NSPS - 40 CFR 60 Subpart A; Rule 212.400, F.A.C., Prevention of Significant Deterioration; and, BACT dated 5/31/2005 for $NO_X$ and PM. The unit is affected by the Acid Rain Program, since it exceeds the requirements of 40 CFR 72.7 by serving a generator with greater than 25 MW. This gas turbine is exempt from the requirements of NSPS - 40 CFR 60, Subpart KKKK since the start of construction was prior to February 18, 2005 the date upon which Subpart KKKK was proposed.}*

## D.1. COMBUSTION TURBINE (EU011)

The specific conditions in this section (**D.1.**) apply to EU011 regardless of the number of operation hours.

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

**D.1.1.** Permitted Capacity. The heat input to the combustion turbine from firing No. 2 fuel oil shall not exceed 434 MMBtu per hour (LHV) based on the following: 100% base load, lower heating value of No. 2 fuel oil, and a compressor inlet air temperature of 41° F. Heat input rates will vary depending upon compressor conditions and the combustion turbine characteristics. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves on file with the Department. [Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), and 62-214.330, F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.2.** 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 determination and resulted in the emission standards specified in this permit. For any request to convert this unit 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 may be required to submit a full PSD permit application complete with a new proposal of the best available control technology as if the unit had never been built. [Permit No. 0870003-007-AC/PSD-FL-348]

*{Permitting Note: See **III.D.3** for BACT if increased hours of operation.}*

**D.1.3.** Methods of Operation. Only distillate fuel oil with a maximum sulfur content of 0.05 percent by weight shall be used in the combustion turbine. [Rule 62-213.410, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

*{Permitting note: Pipeline natural gas is currently unavailable to the Keys.}*

**D.1.4.** Water Injection Technology. The permittee shall operate, and maintain a water injection system designed to achieve the permitted $NO_X$ emissions standards for the unit. [Permit No. 0870003-007-AC/PSD-FL-348 and BACT dated 5/31/2005]

**D.1.5.** 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 combustion turbine 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 of minimizing excess emissions. [Permit No. 0870003-007-AC/PSD-FL-348, BACT dated 5/31/2005]

**D.1.6.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), 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.

**D.1.7.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rules 62-210.700(1), F.A.C.]

**D.1.8.** Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.9.** Definitions.

a. *Excess Emissions* are defined as emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions which occur during startup, shutdown, or malfunction.
b. *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.
c. *Shutdown* is the cessation of the operation of an emissions unit for any purpose.
d. *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.

[Rule 62-210.200, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.10.** Excess Emissions During Startup, Shutdown, Malfunction.

a. During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for more than 2 hours in any 24-hour block averaging period.
b. During all startups, shutdowns, and malfunctions, the $NO_X$ continuous emissions monitoring system (CEMS) shall monitor and record emissions. Up to 2 hours (120 minutes) of monitoring data during any 24-hour block averaging period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions. However, only data obtained during startups, shutdowns, and documented malfunctions may be used for the 2 hour exclusion period. Other arbitrary high readings may not be excluded from compliance averaging periods.
c. A documented malfunction means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile, or electronic mail. In case of

malfunctions, the permittee shall notify the Compliance Authority within one working day. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.11.** NSPS Excess Emissions for $NO_X$ and $SO_2$. The owner or operator shall submit reports of excess emissions and monitor downtime as required by 40 CFR 60.334(j). These provisions include a requirement to correct test data to ISO conditions; however, such correction is not used for compliance determinations with the BACT standards. [40 CFR 60.334 and Permit No. 0870003-007-AC/PSD-FL-348]

**Continuous Monitoring Requirements**

**D.1.12.** $NO_X$ CEMS. The permittee shall install, calibrate, operate, and maintain a CEMS to measure and record $NO_X$ and oxygen concentrations in the combustion turbine exhaust stack. A monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. The $NO_X$ monitoring devices shall comply with the requirements of 40 CFR 60.334(b) for 40 CFR Part 75 monitoring systems. The $NO_X$ CEMS shall be used for the purpose of demonstrating continuous compliance with the $NO_X$ emissions limit (24-hour block average concentration limit) specified in condition **D.2.5. if hours of operation ≤ 2500 hours and D.3.6. if hours of operation > 2500 hours**. [Rule 62-212.400, F.A.C. (BACT); 40 CFR 75; and, Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.13.** $NO_X$ CEMS Data Requirements.

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. A valid hour is one in which at least 1 data point is recorded in each quadrant during which the unit was operating.

b. *Data Reporting*. Data collected by the CEMS shall be used to demonstrate continuous compliance with the emissions standards specified for each 24-hour block averaging period. The block averaging period shall run from midnight to midnight of each day. Emissions shall be reported in units of ppmvd corrected to 15% oxygen for each hour of operation. The compliance averages shall be determined by calculating the arithmetic average of a 24-hour block of all valid hourly emission rates. A minimum of 1 valid hour shall be required to calculate a 24-hour block average. When a monitoring system reports emissions in excess of the standards allowed by this permit, the permittee shall notify the Compliance Authority within one (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. The Department may request a written report summarizing the excess emissions incident. The permittee shall also report excess emissions in a quarterly report as required in specific condition **D.1.10.** of this permit.

c. *Data Exclusion*. As provided in **D.1.9. and D.1.10**., valid hourly emission rates shall not include periods of start up, shutdown, or documented malfunction as described under the excess emissions requirements of this permit. Up to 2 hours of monitoring data during any 24-hour block averaging period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions.

[Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700 and 62-297.520, F.A.C.; 40 CFR 60.7; and, Permit No. 0870003-007-AC/PSD-FL-348]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**D.1.14.** Common Testing Requirements. 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.]

**D.1.15.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU011 shall be tested to demonstrate compliance with the emissions standards for $NO_X$, CO, VE and $NH_3$ (See Specific Condition **D.3.13.).** If conducted at permitted capacity, $NO_X$ emissions data collected during the annual $NO_X$ continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. In the event that the operation of the CT is less than 400 hours per year, annual testing is not required for that year. [Rule 62-297.310(7), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

*{Permitting note: Ammonia slip testing is only required after cumulative hours of operation exceed 1,500 hours starting from the initial installation of the SCR catalyst. See Specific Condition **D.3.13**.}*

**D.1.16.** Compliance Tests Prior To Renewal. Compliance tests shall be performed for $NO_X$, CO and VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **D.2.4. – D.2.6. (**if the cumulative operating hours are ≤ 2,500 hours**) and D.3.5. – D.3.7. (**if the cumulative operating hours are > 2,500 hours**).** VOC emission tests are not required prior to permit renewal provided the CO emission standards are met. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. Testing for ammonia slip in accordance with the requirements of Specific Condition **D.3.13**. will meet the requirements of this condition. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.; and, Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.17.** After Major Repairs or Replacements. The Department may require that additional compliance testing be conducted within 90 days after major repairs or replacements are performed. [Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.18.** Combustion Turbine Testing Capacity. Required performance tests for compliance with standards specified in this permit shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.19.** Sampling Facilities. The permittee shall design the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rule 62-204.800, F.A.C.;40 CFR 60.40a(b); and, Permit No. 0870003-007-AC/PSD-FL-348]

**Recordkeeping and Reporting Requirements**

**D.1.20.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

| Report | Reporting Deadline | Related Condition(s) |
|---|---|---|
| Notice of Excess Emissions per 60.7(c) | Within 30 days following end of each quarter | **D.1.23.** |

**D.1.21.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**D.1.22.** Excess Emissions Reporting.

a. *NSPS Semi-Annual Reports*. For purposes of reporting emissions in excess of NSPS Subpart GG, excess emissions from the gas turbine are defined as: any operating hour in which the CEMS 4-hr rolling average $NO_X$ concentration exceeds the NSPS $NO_X$ emissions standard identified in Appendix GG; and any monitoring period during which the sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in Appendix GG. Within thirty (30) days following each calendar semi-annual period, the permittee shall submit a report on any periods of excess emissions that occurred during the previous semi-annual to the Compliance Authority.

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

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 standards at Specific Condition **D.1.10.** following the NSPS format in 40 CFR 60.7(c), Subpart A. Periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter. [Rules 62-4.130, 62-204.800 and 62-210.700(6), F.A.C.; 40 CFR 60.7 and 60.332(j)(1); and, Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.23.** Fuel Records. The permittee shall demonstrate compliance with the fuel sulfur limits for fuel oil specified in this permit by maintaining records required by 40 CFR 60.334 and 60.335. [Rule 62-4.160(15), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.24.** Monthly Operations Summary. By the fifth calendar day of each month, the permittee shall record the hours of operation and amount of fuel fired for the combustion turbine. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. All hours of operation (including hours during startups, shutdowns, and malfunctions) shall be included in the demonstration of compliance with the 12-month fuel usage limitations. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.25.** Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating hours and emissions from this facility. [Rule 62-210.370(2), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.1.26.** Hours of Operation. Using a component of the gas turbine control system, the permittee shall monitor and record the hours of gas turbine operation. Within five working days following the end of each calendar month, the permittee shall record the total hours of operation (including hours during startups, shutdowns, and malfunctions) for the current month, and the total hours of operation for the current month plus the preceding 11 months. [Rule 62-204.070, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**Other Requirements**

**D.1.27.** Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines, attached to this permit as Appendix NSPS, Subpart A and Appendix NSPS, Subpart GG, respectively. [Rule 62-213.440, F.A.C.]

## D.2. COMBUSTION TURBINE (EU 011) WATER INJECTION ONLY & ≤ 2,500 HOURS

This section of the permit addresses emissions unit EU011 for the period during which the unit operates for 2,500 hours or less on a rolling 12-month total and with water injection only. Upon reaching the first rolling 12-month total of 2,501, section **III.D.3**. of this permit will supersede all conditions in this section **(III.D.2**.).

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

**D.2.1.** Hours of Operation. The combustion turbine shall operate no more than 2,500 hours based on a 12-month rolling total without installing a selective catalytic reduction (SCR) system. Exceeding this restriction shall require the installation and operation of an SCR system as required in **III**.**D.3**. below. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.2.2.** Future Selective Catalytic Reduction (SCR). The permittee shall design and build the project to facilitate and not to hamper or preclude the future installation of the SCR system. The combustion turbine may operate without the use of the SCR system for an initial period during which the total hours of operation do not exceed 2,500 during any 12-month rolling total. [Rule 62-212.400, F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**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.}*

Unless otherwise specified, the averaging times for Specific Conditions **D.2.3. – D.2.8.** are based on the specified averaging time of the applicable test method.

**D.2.3.** Sulfuric Acid Mist (SAM) and Sulfur Dioxides ($SO_2$). Emissions of SAM and $SO_2$ shall be limited by the use of 0.05 percent sulfur fuel oil (or superior fuel oil) and good combustion techniques as specified in this permit. SAM and $SO_2$ emissions shall not exceed 6.8 and 29.5 tons per year, respectively. The permittee shall demonstrate compliance with the fuel sulfur limit by maintaining the fuel records specified by this permit. [Rule 62-212.400, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.2.4.** CO Emissions. CO emissions shall not exceed:
a. 30.0 ppmvd @15% $O_2$; and,
b. 33.0 pounds per hour.
[Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.2.5.** $NO_X$ Emissions. This emissions limit applies during the initial phase of operation when the combustion turbine operates no more than 2,500 hours based on a 12-month rolling total: $NO_X$ emissions from the combustion turbine shall not exceed a BACT emission limit of:
a. 42 ppmvd @15% $O_2$ during annual tests; and,
b. 42.0 ppmvd @15% $O_2$ on a 24-hour block average while firing fuel oil.
[Rule 62-212.400, F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

*{Permitting Note: Pipeline natural gas is currently unavailable to the Keys. However, for a similar unit operating on natural gas and for a comparable number of hours, a BACT limit would likely be set at 15 ppmvd @ 15% $O_2$.}*

**D.2.6.** VE Emissions. Visible emissions from the combustion turbine shall not exceed 10% opacity, based on a 6-minute average. [Rule 62-212.400, F.A.C. (PSD Applicability); Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**D.2.7.** PM/$PM_{10}$ Emissions. Emissions of PM and $PM_{10}$ shall be limited by the use of 0.05 percent sulfur fuel oil (or superior fuel oil) and good combustion techniques as specified in this permit. This work practice standard

is established as a means of ensuring compliance with the BACT $PM/PM_{10}$ emission limits. [Rule 62-212.400, F.A.C. (PSD Applicability); Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**D.2.8.** VOC Emissions. VOC emissions from the combustion turbine shall not exceed:
a. 16.0 ppmvd corrected to 15% oxygen; and,
b. 10.0 pounds per hour.
The VOC emissions shall be measured and reported in terms of methane.
[Permit No. 0870003-007-AC/PSD-FL-348]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.*

**D.2.9.** Test Methods. Required tests shall be performed in accordance with the following reference methods or equivalent:

| Method | Description of Method and Comments |
|---|---|
| 1 | Sample and Velocity Traverses for Stationary Sources |
| 3 | Gas Analysis for Carbon Dioxide, Oxygen, Excess air, And Dry Molecular Weight |
| 3A | Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure) |
| 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 {Note: The method shall be based on a continuous sampling train.} |
| 18 | Measurement of Gaseous Organic Compound Emissions by Gas Chromatography |
| 20 | Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines |
| 25 | Determination of Total Gaseous Nonmethane Organic Emissions as Carbon |
| 25A | Method for Determining Gaseous Organic Concentrations (Flame Ionization) |
| ASTM D6522-00 | Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers |
| ASTM D129-09, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 | Fuel Sampling Methods from the American Standards for Testing and Materials |

The above 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 unless prior written approval is received from the Department. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure

specified in Rule 62-297.620, F.A.C. [Rule 62-297.401, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.2.10.** Common Testing Requirements. 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.]

**D.2.11.** CO. The permittee shall demonstrate compliance with the CO emissions limit by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the requirements of this permit. [Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.2.12.** $NO_X$. The permittee shall demonstrate compliance with the $NO_X$ emissions limit by conducting performance tests and emissions monitoring in accordance with 40 CFR Part 60 Subpart GG and based on a 24-hour block average for data collected from the continuous emissions monitor. [Rule 62-212.400, F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**D.2.13.** VE. The permittee shall demonstrate compliance with the VE emission limit by conducting tests in accordance with EPA Method 9 and the performance testing requirements of this permit. [Rule 62-212.400, F.A.C. (PSD Applicability); Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**D.2.14.** VOCs. The permittee shall demonstrate compliance with the VOC emissions limit by conducting initial tests in accordance with EPA Methods 25 and/or 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions. [Permit No. 0870003-007-AC/PSD-FL-348]

**Recordkeeping and Reporting Requirements**

**D.2.15.** Hours of Operation: Within ten working days following the first consecutive 12-month period in which the hours of operation exceed 2,500, the permittee shall notify the Compliance Authority. The notification shall include a summary of operation for the last 12 months, and the expected date of initial operation of the SCR system for the control of $NO_X$ as required by **III.D.3.** [Permit No. 0870003-007-AC/PSD-FL-348]

## D.3.0. COMBUSTION TURBINE (EU 011) WATER INJECTION AND SCR & > 2,500 Hours

This subsection of the permit addresses the following emissions unit upon exceeding 2,500 hours of operation on a 12-month rolling total and thereafter. Upon exceeding 2,500 hours of operation on a 12-month rolling total, the provisions of subsection **III.D.3** will supersede that of subsection **III.D.2.** for the rest of the operating life of the unit. BACT is water injection and SCR.

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

**D.3.1.** Fuel Limitation. Total fuel usage shall not exceed 13,600,000 gallons of fuel oil during any consecutive 12 months. The permittee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in this permit [Rule 62-213.410, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.2.** Hours of Operation. The combustion turbine may operate continuously (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.3.** Selective Catalytic Reduction (SCR). Within two months after exceeding the 12-month rolling total of 2,500 operating hours, the permittee shall install, calibrate, tune, operate and maintain an SCR system designed to achieve the permitted $NO_X$ emissions standards for the unit in conjunction with the water injection system. [Rule 62-212.400, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**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.}*

Unless otherwise specified, the averaging times for Specific Conditions **D.3.4. – D.3.10**. are based on the specified averaging time of the applicable test method.

**D.3.4.** Sulfuric Acid Mist (SAM) and Sulfur Dioxides ($SO_2$). Emissions of SAM and $SO_2$ shall be limited by the use of 0.05 percent sulfur fuel oil (or superior fuel oil) and good combustion techniques as specified in this permit. SAM and $SO_2$ emissions shall not exceed 6.9 and 39.9 tons per year, respectively. Compliance with the $SO_2$ limit provides assurance that SAM emissions stay within permitted limits. The permittee shall demonstrate compliance with the fuel sulfur limit by maintaining the records specified by this permit. [Rule 62-212.400, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348].

**D.3.5.** CO Emissions. CO emissions from the combustion turbine shall not exceed:
a. 20.0 ppmvd @15% $O_2$;
b. 20.0 lbs per hour.
[Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.6.** $NO_X$ Emissions.
a. The combustion turbine and SCR system shall be designed and constructed to meet an emission limit of 5.0 ppmvd @15% $O_2$. This shall be demonstrated during each initial test following installation of new catalyst.
b. During normal operation, $NO_X$ emissions shall not exceed 9.0 ppmvd @15% $O_2$ on a 24-hour block average.
[Rule 62-212.400, F.A.C.; Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

*{Permitting note: The 5.0 ppmvd value reflects BACT. The 9.0 ppmvd value is based on the fuel use limitation that would limit $NO_X$ emissions to less than 40 tons per year. The Department will revise the higher long term limit downward in conjunction with any future applications that will increase fuel use above 13,600,000 gallons per year.}*

**D.3.7.** VE Emissions. VE from the combustion turbine shall not exceed 10% opacity, based on a 6-minute average. [Rule 62-212.400, F.A.C. (PSD Applicability); Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**D.3.8.** $PM/PM_{10}$ Emissions. Emissions of PM and $PM_{10}$ shall be limited by the use of 0.05 percent sulfur fuel oil (or superior fuel oil) and good combustion techniques as specified in this permit. This work practice standard is established as a means of ensuring compliance with the BACT $PM/PM_{10}$ emission limits. [Rule 62-212.400, F.A.C. (PSD Applicability); Permit No. 0870003-007-AC/PSD-FL-348; and, BACT dated 5/31/2005]

**D.3.9.** Ammonia ($NH_3$). The ammonia slip rate shall be limited to 10.0 ppmvd @ 15% $O_2$. [Rule 62-212.400, F.A.C. (BACT) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.10.** VOC Emissions. VOC emissions from the combustion turbine shall not exceed:
a. 8.0 ppmvd corrected to 15% oxygen; and,
b. 5.0 pounds per hour.
The VOC emissions shall be measured and reported in terms of methane.
[Permit No. 0870003-007-AC/PSD-FL-348]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**D.3.11.** Test Methods. Required tests shall be performed in accordance with the following reference methods or equivalent:

| Method | Description of Method and Comments |
|---|---|
| 1 | Sample and Velocity Traverses for Stationary Sources |
| 3 | Gas Analysis for Carbon Dioxide, Oxygen, Excess air, And Dry Molecular Weight |
| 3A | Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure) |
| 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 {Note: The method shall be based on a continuous sampling train.} |
| 20 | Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines |
| 25 | Determination of Total Gaseous Nonmethane Organic Emissions as Carbon |
| 25A | Method for Determining Gaseous Organic Concentrations (Flame Ionization) |
| CTM-027 | Conditional EPA Test Method 027, Measurement of Ammonia Slip (or equivalent method) |
| ASTM D6522-00 | Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers |

| Method | Description of Method and Comments |
|---|---|
| ASTM D129-09, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 | Fuel Sampling Methods from the American Standards for Testing and Materials |

The above 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 unless prior written approval is received from the Department. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure specified in Rule 62-297.620, F.A.C. [Rule 62-297.401, F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.12.** Common Testing Requirements. 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.]

**D.3.13.** Ammonia Slip Testing Required. Testing for ammonia slip is required during the first scheduled annual performance tests after the cumulative hours of operation exceed 1,500 actual hours starting from the initial installation of the SCR catalyst. Thereafter, ammonia testing is required during the first scheduled annual performance tests after subsequent cumulative 1,500 hours of operation or after regeneration, replacement or addition to the SCR catalyst system. [Rule 62-297.310(7), F.A.C. and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.14.** CO. The permittee shall demonstrate compliance with the CO emissions limit by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the requirements of this permit. [Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.15.** $NO_X$. The permittee shall demonstrate compliance with the $NO_X$ standard by conducting performance tests and emissions monitoring in accordance with 40 CFR Part 60 Subpart GG and based on a 24-hour block average for data collected from the continuous emissions monitor. [Rule 62-212.400, F.A.C. (BACT) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.16.** VE. The permittee shall demonstrate compliance with the VE emissions limit by conducting tests in accordance with EPA Method 9 and the performance testing requirements of this permit. [Rule 62-212.400, F.A.C. (PSD Applicability) and Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.17.** VOC. The permittee shall demonstrate compliance with these standards by conducting initial tests in accordance with EPA Methods 25 and/or 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions. [Permit No. 0870003-007-AC/PSD-FL-348]

**D.3.18.** Sampling Facilities. The permittee shall provide facilities for the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. FMPA shall advise the Department of any requirements within the cited rule that would be incompatible with the operation of an SCR system or unadvisable due to storm design criteria. [Permit No. 0870003-007-AC/PSD-FL-348]

This section of the permit addresses the following emissions unit.

| ID No. | Emission Unit Description |
|---|---|
| 003 | EP2 Diesel Peaking Unit #2 (2,250 kW/3,070 HP; 10.6 L/cylinder; 16 cylinders) - originally built in 1964; reconstructed in 2010; 6 foot stack height; 2 foot stack exit diameter. |

The following table provides important details for this emissions unit:

| Engine kW/HP | Date of Construction/ Reconstruction | Model Year | Primary Fuel | Type of Engine | Displacement in liters | Date of last modification or reconstruction |
|---|---|---|---|---|---|---|
| 2,250 kW<br>3,070 HP | 1964/2010 | 1964<br>2010 | Diesel | Peaking | 169.6 (total)<br>(10.6 l/cylinder) | 2010 |

*{Permitting Note: This compression ignition (CI) engine is regulated under 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C. and 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Compliance with the requirements of 40 CFR 63, Subpart ZZZZ is met by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements of 40 CFR 63, Subpart ZZZZ apply for this engine. This permit section addresses a stationary CI RICE with a displacement greater than 10 liters per cylinder and less than 30 liters per cylinder, that is located at an area source of HAP and that has been reconstructed on or after 6/12/2006. This engine was reconstructed to meet the same standards as a 2010 model year marine engine.}*

**Equipment**

**E.1.** Peaking Unit Diesel Engine. The permittee is authorized to operate the existing diesel engine EP2 (ARMS ID No. 003) a maximum of 2,500 hours per calendar year. [Permit No. 0870003-013-AC, Specific Condition 1]

**Performance Restrictions**

**E.2.** Authorized Fuel. The Stationary Reciprocating Internal Combustion Engines (RICE) must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content.* The sulfur content shall not exceed = 15 parts per million (ppm) = 0.0015% by weight (ultra low sulfur) for non-road fuel.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 80.510(b) and Permit No. 0870003-013-AC, Specific Condition 2]

**E.3.** Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the emission limits of 40 CFR 94.8. [40 CFR 60.4211(a) & (c) and Permit No. 0870003-013-AC, Specific Condition 3]

**Emissions Standards**

**E.4.** THC + $NO_X$ Emissions. Total hydrocarbons (THC) and nitrogen oxides ($NO_X$) emissions shall not exceed 7.8 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4204(b), 40 CFR 60.4201(d) & 40 CFR 94.8; and, Permit No. 0870003-013-AC, Specific Condition 4]

**E.5.** CO Emissions. Carbon monoxide (CO) emissions shall not exceed 5.0 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(d) & 40 CFR 94.8; and, Permit No. 0870003-013-AC, Specific Condition 5]

**E.6.** PM Emissions. Particulate matter (PM) emissions shall not exceed 0.27 g/kW-hr. [40 CFR 60.4204(b), 40 CFR 60.4201(d) & 40 CFR 94.8; and, Permit No. 0870003-013-AC, Specific Condition 6]

**Monitoring Requirements**

**E.7.** Hour Meter. The owner or operator must install, maintain and operate a non-resettable hour meter. [Permit No. 0870003-013-AC, Specific Condition 7]

**Compliance Requirements**

**E.8.** Initial Compliance Requirements. Initial compliance shall be demonstrated by one of the following methods:

a. *Certification*. Purchasing, or otherwise owning or operating, an engine certified to the emission standards specified in Specific Conditions 4. – 6.
b. *Performance Tests*. Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[40 CFR 60.4211(e) and Permit No. 0870003-013-AC, Specific Condition8]

**E.9.** Subsequent Compliance Requirements. If the owner or operator does not install, configure, operate, and maintain the engine according to the manufacturer's emission-related written instructions, or emission-related settings are changed in a way that is not permitted by the manufacturer, compliance must be demonstrated as follows:

a. *Maintenance Plan*. Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
b. *Performance Tests*. In addition, an initial performance test must be conducted to demonstrate compliance with the emission limits in Specific Conditions 4. – 6. within 1 year of startup, or within 1 year after the engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer. Subsequent performance testing must be conducted every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the emission limits.

[40 CFR 60.4211(g)(3) and Permit No. 0870003-013-AC, Specific Condition 9]

**E.10.** Testing Requirements. Any required performance tests must be conducted according to the following:

a. The performance test must be conducted according to the in-use testing procedures in 40 CFR 1042, Subpart F, which also references 40 CFR 1065, available at the following links:
40 CFR 1042 – Control of Emissions From New and In-use Marine Compressions-Ignition Engines
40 CFR 1065 – Engine Testing Procedures
b. Exhaust emissions must not exceed the not to exceed (NTE) numerical requirements, rounded to the same number of decimal places as the standards in Specific Conditions **4.** – **6.**, determined from the following equation: NTE requirement for each pollutant = (1.25) x (Standard).

[40 CFR 60.4212(a) – (c) and Permit No. 0870003-013-AC, Specific Condition 10]

**Records and Reports**

**E.11.** Test Report. The results of any required compliance shall be submitted to the Department's South District Office. See Appendix TR, Testing Requirements. [Rule 62-297, F.A.C. and Permit No. 0870003-013-AC, Specific Condition 11]

**E.12.** Annual Operating Report.

a. The permittee shall submit to the Compliance Authority, each calendar year, on or before April 1st, a completed DEP Form No. 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year.

b. Emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C.

[Rules 62-210.370(2) & (3) and 62-213.440(3)(a)2., F.A.C.; and, Permit No. 0870003-013-AC, Specific Condition 12]

**E.13.** Notifications and Records. The following requirements must be met:

a. *Initial Notification.* Submit an initial notification as required in §60.7(a)(1). The notification must include the following information:
   (1) Name and address of the owner or operator;
   (2) The address of the affected source;
   (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
   (4) Emission control equipment; and
   (5) Fuel used.

b. *Records*. The following records must be kept:
   (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
   (2) Maintenance conducted on the engine.
   (3) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
   (4) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40 CFR 60.4214(a) and Permit No. 0870003-013-AC, Specific Condition 13]

**E.14.** Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews. Year-to-date hours of operation of the unit and fuel usage in gallons for the unit are to be monitored and recorded. Records concerning maintenance conducted on the engine must also be kept, and documentation from the manufacturer that the engine is certified to meet the emission standards must be on file.

b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 & 40 CFR 63.10(b)(1); and, Permit No. 0870003-013-AC, Specific Condition 14]

**General Provisions**

**E.15.** NSPS 40 CFR 60, Subpart A. The engine shall comply with the requirements of 40 CFR 60, Subpart A, General Provisions, listed below, which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. See Appendix NSPS, Subpart A, General Provisions. [Rule 62-204.800(8)(d), F.A.C. and Permit No. 0870003-013-AC, Specific Condition 15]

| General Provisions Citation | Subject of Citation |
|---|---|
| §60.1 | General applicability of the General Provisions |
| §60.2 | Definitions (additional terms defined in §60.4219) |
| §60.3 | Units and abbreviations |
| §60.4 | Address |

| General Provisions Citation | Subject of Citation |
|---|---|
| §60.5 | Determination of construction or modification |
| §60.6 | Review of plans |
| §60.7 | Notification and Recordkeeping (only as specified in Condition 13.) |
| §60.8 | Performance tests (only if engine is not certified) |
| §60.9 | Availability of information |
| §60.10 | State Authority |
| §60.12 | Circumvention |
| §60.14 | Modification |
| §60.15 | Reconstruction |
| §60.16 | Priority list |
| §60.17 | Incorporations by reference |
| §60.19 | General notification and reporting requirements |

## Subsection F. Emissions Unit 014

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

| E.U. ID No. | Brief Description |
|---|---|
| 014 | Black Start Diesel Engine |

This unit is a Detroit Diesel Company, diesel fired black start engine with 450 HP, installed in 1978 and used for starting EU 007. Model number is 12V-71-N; engine contains 12 cylinders; displacement is 1.16 liters per cylinder.

The following table provides important details for this emissions unit:

| E.U. ID No. | Engine Brake HP | Date of Construction | Model Year | Primary Fuel | Type of Engine | Displacement liters/cylinder (l/c) | Model No. | Date of last mod. or re-construct -ion |
|---|---|---|---|---|---|---|---|---|
| 014 | 450 | 01/01/1972 | 1972 | Diesel | Black Start | 1.16 | 12V-71-N | N/A |

*{Permitting Note: This emissions unit, compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. This RICE is for emergency engines. This permit section addresses an "existing" stationary CI RICE less than or equal to 500 HP that is located at an Area source of HAPs and that has not been modified or reconstructed after 6/12/2006. If the RICE is modified or reconstructed after 7/11/2005, the NSPS 40 CFR 60, Subpart IIII, will then apply.* ***The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013****.}*

### Essential Potential to Emit (PTE) Parameters

**F.1.** Engine Startup. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

### Emission Limitations and Operating Requirements

**F.2.** Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a) & Table 2d4.a.]

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a) & Table 2d4.b.]

c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603(a) & Table 2d4.c.]

d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]

e. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in F**.2.a**. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or

percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

**Compliance**

**F.3.** Continuous Compliance. At all times, this unit:

a. Must be in compliance with the operating limitations in this section.

b. Must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605]

**Recordkeeping Requirements**

**F.4.** Maintenance Records. The owner or operator must keep records of the maintenance conducted on this unit in order to demonstrate that it is operated and maintained according to their own maintenance plan. [40 CFR 63.6655(e)]

**F.5.** Record Retention.

*a.* The owner or operator must keep records in a suitable and readily available form for expeditious reviews.

b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

**Reporting Requirements**

**General Provisions**

**F.6.** 40 CFR 63 Subpart A, General Provisions. This engine shall comply with all applicable requirements of 40 CFR 63 Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. This engine shall comply with the applicable portions of Appendix 40 NESHAP Subpart A included with this permit, as specified below.

| General Provisions Citation | Subject of Citation |
|---|---|
| §63.1 | General applicability of the General Provisions |
| §63.2 | Definitions |
| §63.3 | Units and abbreviations |
| §63.4 | Prohibited activities and circumvention |
| §63.5 | Construction and reconstruction |
| §63.6(a) | Applicability |

| General Provisions Citation | Subject of Citation |
|---|---|
| §63.9(i) | Adjustment of submittal deadlines |
| §63.9(j) | Change in previous information |
| §63.10(a) | Administrative provisions for recordkeeping/reporting |
| §63.10(b)(1) | Record retention |
| §63.10(b)(2)(vi)–(xi) | Records |
| §63.10(b)(2)(xii) | Record when under waiver |
| §63.10(b)(2)(xiv) | Records of supporting documentation |
| §63.10(b)(3) | Records of applicability determination |
| §63.10(d)(1) | General reporting requirements |
| §63.10(d)(4) | Progress Reports |
| §63.10(f) | Waiver for recordkeeping/reporting |
| §63.12 | State authority and delegations |
| §63.13 | Addresses |
| §63.14 | Incorporation by reference |
| §63.15 | Availability of information |

[40 CFR 63.6665]Rule 62-204.800(11)(d)1., F.A.C.; Permit No. 0830007-013-AC, Specific Condition A.13.]

Operated by: Florida Municipal Power Agency
ORIS Code: 6584

The emissions unit listed below is regulated under Acid Rain, Phase II.

| E.U. No. | EPA Unit ID# | Brief Description |
|---|---|---|
| 011 | CT4 | 48 MW Simple Cycle Combustion Turbine |

The emission units listed below are regulated under Acid Rain New Unit Exemption.

| E.U. No. | EPA Unit ID# | Brief Description |
|---|---|---|
| 005 | D-1 | 8.8 MW Medium Speed Diesel Generator |
| 006 | D-2 | 8.8 MW Medium Speed Diesel Generator |
| 007 | CT-1 | 23.5 MW Simple Cycle Combustion Turbine |
| 008 | CT-2 | 19.77 MW Simple Cycle Combustion Turbine |
| 009 | CT-3 | 19.77 MW Simple Cycle Combustion Turbine |

**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(s) listed below:
a. DEP Form No. 62-210.900(1)(a), dated 07/20/09, received 07/24/09;
b. DEP Form No. 62-210.900(1)(a)2., dated 07/20/09, received 07/24/09.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

**A.2.** Sulfur Dioxide ($SO_2$) Emission Allowances. $SO_2$ 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. & 3., F.A.C.]

**A.3.** Comments, Notes and Justifications. EPA unit ID #1 on the Acid Rain Part application is for the Ralph Garcia Steam Plant (previously designated as E.U. ID No. 001).. It continues to receive $SO_2$ allowances under the retired unit exemption provisions of the Acid Rain program; however, it is not physical able to ever resume operation as it was removed from the facility in 2005.

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# 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**

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

| Plant name **Stock Island Power Plant** | State **FL** | **6584** ORIS/Plant Code |
|---|---|---|

**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".**

**For new units or $SO_2$ Opt-in units, enter the requested information in columns "d" and "e."**

| a | b | c | d | e |
|---|---|---|---|---|
| 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 |
| **1** | **No** | Yes | **Retired** | **Retired** |
| **CT4** | **No** | Yes | **06/28/2006** | **12/25/2006** |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | |

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| **Stock Island Power Plant** |
|---|
| Plant Name (from STEP 1) |

**STEP 3**

**Read the standard requirements.**

Acid Rain Part 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;
(2) 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.

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 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain 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 $SO_2$ Opt-in unit, a monitoring plan for each $SO_2$ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for $SO_2$ 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:
(i) 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
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later 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).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) 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. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) 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.
(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 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.

(1) 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 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, in writing by the EPA or the DEP:
(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, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) 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 recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

**Stock Island Power Plant**
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 Part 72, Subpart I, and 40 CFR Part 75.

Liability.

(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(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) 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.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(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 units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable 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 (Phase II repowering extension plans) and 40 CFR 76.11 ($NO_X$ averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of 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.
(7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

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:
(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; *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 Federal Power Act or affecting the authority of the Federal Energy Regulatory 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.

**STEP 4**
**For $SO_2$ Opt-in units only.**

**In column "f" enter the unit ID# for every $SO_2$ Opt-in unit identified in column "a" of 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.**

| f | g | h (not required for renewal application) |
|---|---|---|
| Unit ID# | Description of the combustion unit | Number of hours unit operated in the six months preceding initial application |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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| **Stock Island Power Plant** |
|---|
| Plant Name (from STEP 1) |

**STEP 5**

**For $SO_2$ Opt-in units only.**
**(Not required for $SO_2$ Opt-in renewal applications.)**

**In column "i" enter the unit ID# for every $SO_2$ Opt-in unit identified in column "a" (and in column "f").**

**For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.**

| i | j | k | l | m | n |
|---|---|---|---|---|---|
| Unit ID# | Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu) | Actual $SO_2$ Emissions Rate under 40 CFR 74.22 (lbs/mmBtu) | Allowable 1985 $SO_2$ Emissions Rate under 40 CFR 74.23 (lbs/mmBtu) | Current Allowable $SO_2$ Emissions Rate under 40 CFR 74.24 (lbs/mmBtu) | Current Promulgated $SO_2$ Emissions Rate under 40 CFR 74.25 (lbs/mmBtu) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**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 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 $SO_2$ under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations 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, phone, and e-mail address; sign, and date.**

**Certification (for designated representative or alternate designated representative only)**

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Name **Edward Garcia** | Title **Director of Generation** |
|---|---|
| Owner Company Name **Keys Energy Services** | |
| Phone **305-295-1134** | E-mail address **Edward.garcia@keysenergy.com** |
| Signature [signature] | Date 7/20/09 |

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# Acid Rain New Unit Exemption

For more information, see instructions and refer to Rule 62-214.340(1), F.A.C., and 40 CFR 72.7

This submission is: ☐ New x Revised

**STEP 1**

**Identify the new unit by plant name, state, ORIS or Plant Code (if assigned) and unit ID#.**

| Plant Name | State | ORIS/Plant Code | Unit ID# |
|---|---|---|---|
| Stock Island Power Plant | Florida | 7143 | D-1 |

**STEP 2**

**List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.**

| | | | | | TOTAL |
|---|---|---|---|---|---|
| 8.8 MWe | MWe | MWe | MWe | MWe | 8.8 MWe |

**STEP 3**

**List all fuels currently burned or expected to be burned, by the unit, and the percent sulfur content by weight of each.**

| Fuel (current) | Sulfur Content (current) | Fuel (expected) | Sulfur Content (expected) |
|---|---|---|---|
| No. 2 Ultra Low Sulfur Fuel Oil | 0.00041% | No. 2 Ultra Low Sulfur Fuel Oil | 0.05% |
| | % | | % |
| | % | | % |
| | % | | % |

**STEP 4**

**Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).**

**January 1, 2009**

**STEP 5**

**Read the special provisions.**

**Special Provisions**

(1) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(1), F.A.C., shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under Rule 62-214.340(1), F.A.C., and (ii) comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
(2) For any period for which a unit is exempt under Rule 62-214.340(1), F.A.C., the unit is not an Acid Rain unit and is not eligible to be an opt-in source under 40 CFR Part 74. As a non-Acid Rain unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR Part 70.
(3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the DEP. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners and operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.
(4) On the earliest of the following dates, a unit exempt under Rule 62-214.340(1), F.A.C., shall lose its exemption and become an Acid Rain unit: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain Part application 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR Part 75 , a unit that loses its exemption under Rule 62-214.340(1), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

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| Plant Name (from STEP 1) |
|---|
| Stock Island Power Plant |

**STEP 6**

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

**Certification (for designated representative or alternate designated representative only)**

I am authorized to make this submission on behalf of the owners and operators of the acid rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name Edward Garcia | Title Director of Generation dba - Keys Energy Services |
| Owner Company Name Utility Board of the City of Key West | |
| Phone 305-295-1134 | E-mail Address Edward.Garcia@keysenergy.com |
| Signature [signature] | Date 7/21/09 |

**Certification (for certifying officials only)**

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

**Certification (for additional certifying officials, if applicable)**

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

DEP Form No. 62-210.900(1)(a)2. - Form
Effective: 3/16/08

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# Acid Rain New Unit Exemption

For more information, see instructions and refer to Rule 62-214.340(1), F.A.C., and 40 CFR 72.7

This submission is: ☐ New x Revised

**STEP 1**

**Identify the new unit by plant name, state, ORIS or Plant Code (if assigned) and unit ID#.**

| Plant Name | State | ORIS/Plant Code | Unit ID# |
|---|---|---|---|
| Stock Island Power Plant | Florida | 7144 | D-2 |

**STEP 2**

**List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.**

| | | | | | TOTAL |
|---|---|---|---|---|---|
| 8.8 MWe | MWe | MWe | MWe | MWe | 8.8 MWe |

**STEP 3**

**List all fuels currently burned or expected to be burned, by the unit, and the percent sulfur content by weight of each.**

| Fuel (current) | Sulfur Content (current) | Fuel (expected) | Sulfur Content (expected) |
|---|---|---|---|
| No. 2 Ultra Low Sulfur Fuel Oil | 0.00041% | No. 2 Ultra Low Sulfur Fuel Oil | 0.05% |
| | % | | % |
| | % | | % |
| | % | | % |

**STEP 4**

**Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).**

**January 1, 2009**

**STEP 5**

**Read the special provisions.**

**Special Provisions**

(1) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(1), F.A.C., shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under Rule 62-214.340(1), F.A.C., and (ii) comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
(2) For any period for which a unit is exempt under Rule 62-214.340(1), F.A.C., the unit is not an Acid Rain unit and is not eligible to be an opt-in source under 40 CFR Part 74. As a non-Acid Rain unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR Part 70.
(3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the DEP. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners and operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.
(4) On the earliest of the following dates, a unit exempt under Rule 62-214.340(1), F.A.C., shall lose its exemption and become an Acid Rain unit: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain Part application 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR Part 75 , a unit that loses its exemption under Rule 62-214.340(1), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

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| Plant Name (from STEP 1) |
|---|
| Stock Island Power Plant |

**STEP 6**

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

**Certification (for designated representative or alternate designated representative only)**

I am authorized to make this submission on behalf of the owners and operators of the acid rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name Edward Garcia | Title Director of Generation |
| Owner Company Name Utility Board of the City of Key West dba - Keys Energy Services | |
| Phone 305-295-1134 | E-mail Address Edward.Garcia@keysenergy.com |
| Signature [signature] | Date 7/21/09 |

**Certification (for certifying officials only)**

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

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| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

DEP Form No. 62-210.900(1)(a)2. - Form
Effective: 3/16/08

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| Plant Name (from STEP 1) |
|---|
| Stock Island Power Plant |

**STEP 6**

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

**Certification (for designated representative or alternate designated representative only)**

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| Owner Company Name Utility Board of The City of Key West | |
| Phone 305-295-1134 | E-mail Address Edward.Garcia@keysenergy.com |
| Signature Edward Garcia | Date 7/21/09 |

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|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

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| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

DEP Form No. 62-210.900(1)(a)2. - Form
Effective: 3/16/08

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# Acid Rain New Unit Exemption

For more information, see instructions and refer to Rule 62-214.340(1), F.A.C., and 40 CFR 72.7

This submission is: ☐ New X Revised

**STEP 1**

**Identify the new unit by plant name, state, ORIS or Plant Code (if assigned) and unit ID#.**

| Plant Name | State | ORIS/Plant Code | Unit ID# |
|---|---|---|---|
| Stock Island Power Plant | Florida | | CT-2 |

**STEP 2**

**List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.**

| | | | | | TOTAL |
|---|---|---|---|---|---|
| 19.77 MWe | MWe | MWe | MWe | MWe | 19.77 MWe |

**STEP 3**

**List all fuels currently burned or expected to be burned, by the unit, and the percent sulfur content by weight of each.**

| Fuel (current) | Sulfur Content (current) | Fuel (expected) | Sulfur Content (expected) |
|---|---|---|---|
| No. 2 Ultra Low Sulfur Fuel Oil | 0.00041% | No. 2 Ultra Low Sulfur Fuel Oil | Less than 0.05% |
| | % | | % |
| | % | | % |

**STEP 4**

**Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).**

**January 1, 2009**

**STEP 5**

**Read the special provisions.**

**Special Provisions**

(1) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(1), F.A.C., shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under Rule 62-214.340(1), F.A.C., and (ii) comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
(2) For any period for which a unit is exempt under Rule 62-214.340(1), F.A.C., the unit is not an Acid Rain unit and is not eligible to be an opt-in source under 40 CFR Part 74. As a non-Acid Rain unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR Part 70.
(3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the DEP. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners and operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.
(4) On the earliest of the following dates, a unit exempt under Rule 62-214.340(1), F.A.C., shall lose its exemption and become an Acid Rain unit: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain Part application 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR Part 75 , a unit that loses its exemption under Rule 62-214.340(1), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

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Effective: 3/16/08

1

| Plant Name (from STEP 1) |
|---|
| Stock Island Power Plant |

**STEP 6**

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

**Certification (for designated representative or alternate designated representative only)**

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| | |
|---|---|
| Name Edward Garcia | Title Director of Generation |
| Owner Company Name Utility Board of The City of Key West dba - Keys Energy Services | |
| Phone 305-295-1134 | E-mail Address Edward.Garcia@keysenergy.com |
| Signature [signature] | Date 7/21/09 |

**Certification (for certifying officials only)**

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| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

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| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

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Effective: 3/16/08

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# Acid Rain New Unit Exemption

For more information, see instructions and refer to Rule 62-214.340(1), F.A.C., and 40 CFR 72.7

This submission is: ☐ New X Revised

**STEP 1**

**Identify the new unit by plant name, state, ORIS or Plant Code (if assigned) and unit ID#.**

| Plant Name | State | ORIS/Plant Code | Unit ID# |
|---|---|---|---|
| Stock Island Power Plant | Florida | | CT-3 |

**STEP 2**

**List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.**

| | | | | | TOTAL |
|---|---|---|---|---|---|
| 19.77 MWe | MWe | MWe | MWe | MWe | 19.77 MWe |

**STEP 3**

**List all fuels currently burned or expected to be burned, by the unit, and the percent sulfur content by weight of each.**

| Fuel (current) | Sulfur Content (current) | Fuel (expected) | Sulfur Content (expected) |
|---|---|---|---|
| No. 2 Ultra Low Sulfur Fuel Oil | 0.00041% | No. 2 Ultra Low Sulfur Fuel Oil | Less than 0.05% |
| | % | | % |
| | % | | % |

**STEP 4**

**Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).**

**January 1, 2009**

**STEP 5**

**Read the special provisions.**

**Special Provisions**

(1) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(1), F.A.C., shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under Rule 62-214.340(1), F.A.C., and (ii) comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
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(3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the DEP. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners and operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.
(4) On the earliest of the following dates, a unit exempt under Rule 62-214.340(1), F.A.C., shall lose its exemption and become an Acid Rain unit: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain Part application 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR Part 75 , a unit that loses its exemption under Rule 62-214.340(1), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

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Effective: 3/16/08

1

| Plant Name (from STEP 1) |
|---|
| Stock Island Power Plant |

**STEP 6**

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

**Certification (for designated representative or alternate designated representative only)**

I am authorized to make this submission on behalf of the owners and operators of the acid rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name Edward Garcia | Title Director of Generation dba - Keys Energy Services |
| Owner Company Name Utility Board of The City of Key West. | |
| Phone 305-295-1134 | E-mail Address Edward.Garcia@keysenergy.com |
| Signature [signature] | Date 7/21/09 |

**Certification (for certifying officials only)**

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

**Certification (for additional certifying officials, if applicable)**

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| | |
|---|---|
| Name | Title |
| Owner Company Name | |
| Phone | E-mail Address |
| Signature | Date |

DEP Form No. 62-210.900(1)(a)2. - Form
Effective: 3/16/08

2

**Clean Air Interstate Rule (CAIR).**

**Operated by**: Florida Municipal Power Agency
**Plant**: Stock Island Power Plant
**ORIS Code**: 6584

The emissions unit is regulated under the Clean Air Interstate Rule.

| EU No. | EPA Unit ID# | Brief Description |
|---|---|---|
| 011 | CT4 | 48.00 MW Simple Cycle Combustion Turbine |

**1.** Clean Air Interstate Rule Application. 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.]

# 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 submission is: ■ New ☐ Revised ☐ Renewal

**STEP 1**

**Identify the source by plant name and ORIS or EIA plant code**

| Plant Name: | State: Florida | ORIS or EIA Plant Code: |
|---|---|---|
| **Stock Island Power Plant** | | **6584** |

**STEP 2**

**In column "a" enter the unit ID# for every CAIR unit at the CAIR source.**

**In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).**

**For new units, enter the requested information in columns "e" and "f.**

| a | b | c | d | e | f |
|---|---|---|---|---|---|
| Unit ID# | Unit will hold nitrogen oxides ($NO_X$) allowances in accordance with 40 CFR 96.106(c)(1) | Unit will hold sulfur dioxide ($SO_2$) allowances in accordance with 40 CFR 96.206(c)(1) | Unit will hold $NO_X$ Ozone Season allowances in accordance with 40 CFR 96.306(c)(1) | New Units<br><br>Expected Commence Commercial Operation Date | New Units<br><br>Expected Monitor Certification Deadline |
| CT4 | X | X | X | | |
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Effective: 3/16/08

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| Plant Name (from STEP 1) | **Stock Island Power Plant** |
|---|---|

**STEP 3**

**Read the standard requirements.**

**CAIR $NO_X$ ANNUAL TRADING PROGRAM**

CAIR Part 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
(ii) [Reserved];
(2) 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 96, Subpart CC, 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 $NO_X$ 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 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance 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.

$NO_X$ Emission Requirements.

(1) 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's compliance account, CAIR $NO_X$ allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total $NO_X$ emissions for the control period from all CAIR $NO_X$ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
(2) A CAIR $NO_X$ unit shall be subject 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 40 CFR 96.170(b)(1) or (2) and for each 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 in a calendar year before the year for which the CAIR $NO_X$ allowance was allocated.
(4) CAIR $NO_X$ allowances shall be held in, deducted from, or transferred into or among CAIR $NO_X$ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
(5) A CAIR $NO_X$ allowance is a limited authorization to emit one ton of $NO_X$ in accordance with the CAIR $NO_X$ Annual Trading Program. No provision of the CAIR $NO_X$ Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR $NO_X$ allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR $NO_X$ allowance to or from a CAIR $NO_X$ unit's compliance account is incorporated automatically in any CAIR Part of the 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 96.154(d)(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 certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR $NO_X$ 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 shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required 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.

| Plant Name (from STEP 1) | **Stock Island Power Plant** |
|---|---|

**STEP 3, Continued**

Liability.

(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 $NO_X$ 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 $NO_X$ unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**CAIR $SO_2$ TRADING PROGRAM**

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source shall:
(i) 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 $SO_2$ source and each CAIR $SO_2$ 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 $SO_2$ source and each $SO_2$ CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96 ,Subpart HHH, and Rule 62-296.470, 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 $SO_2$ source with the following CAIR $SO_2$ Emission Requirements.

$SO_2$ Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR $SO_2$ allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR $SO_2$ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
(2) A CAIR $SO_2$ unit shall be subject to the requirements under paragraph (1) of the Sulfur 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 96.270(b)(1) or (2) and for each control period thereafter.
(3) A CAIR $SO_2$ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the $SO_2$ Emission Requirements, for a control period in a calendar year before the year for which the CAIR $SO_2$ allowance was allocated.
(4) CAIR $SO_2$ allowances shall be held in, deducted from, or transferred into or among CAIR $SO_2$ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
(5) A CAIR $SO_2$ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR $SO_2$ Trading Program. No provision of the CAIR $SO_2$ Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR $SO_2$ allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR $SO_2$ allowance to or from a CAIR $SO_2$ unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR $SO_2$ unit.

Excess Emissions Requirements.

If a CAIR $SO_2$ source emits $SO_2$ during any control period in excess of the CAIR $SO_2$ emissions limitation, then:
(1) The owners and operators of the source and each CAIR $SO_2$ unit at the source shall surrender the CAIR $SO_2$ allowances required for deduction under 40 CFR 96.254(d)(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 AAA, the Clean Air Act, and applicable state law.

| Plant Name (from STEP 1) | **Stock Island Power Plant** |
|---|---|

**STEP 3, Continued**

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR $SO_2$ source and each CAIR $SO_2$ 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.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR $SO_2$ 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 shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR $SO_2$ Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR $SO_2$ Trading Program or to demonstrate compliance with the requirements of the CAIR $SO_2$ Trading Program.

(2) The CAIR designated representative of a CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source shall submit the reports required under the CAIR $SO_2$ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR $SO_2$ source and each CAIR $SO_2$ unit shall meet the requirements of the CAIR $SO_2$ Trading Program.

(2) Any provision of the CAIR $SO_2$ Trading Program that applies to a CAIR $SO_2$ source or the CAIR designated representative of a CAIR $SO_2$ source shall also apply to the owners and operators of such source and of the CAIR $SO_2$ units at the source.

(3) Any provision of the CAIR $SO_2$ Trading Program that applies to a CAIR $SO_2$ unit or the CAIR designated representative of a CAIR $SO_2$ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR $SO_2$ 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 $SO_2$ source or CAIR $SO_2$ unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**CAIR $NO_x$ OZONE SEASON TRADING PROGRAM**

CAIR Part Requirements.

(1) 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 96.322 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 $NO_X$ 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 $NO_x$ Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, 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 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 96.354(a) in an amount not less than the tons of total $NO_X$ emissions for the control period from all CAIR $NO_X$ Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.

(2) A CAIR $NO_X$ Ozone Season unit 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 certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.

(3) A CAIR $NO_X$ Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the $NO_x$ Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR $NO_X$ Ozone Season allowance was 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 Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.

(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 Trading Program. No provision of the CAIR $NO_X$ Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

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(6) A CAIR $NO_X$ Ozone Season allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, 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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| Plant Name (from STEP 1) | **Stock Island Power Plant** |

**STEP 3, Continued**

Excess Emissions Requirements.

If a CAIR $NO_X$ Ozone Season source emits $NO_X$ during any control period in excess of the CAIR $NO_X$ Ozone Season emissions limitation, then:
(1) The owners and operators of the source and each CAIR $NO_X$ Ozone Season unit at the source shall surrender the CAIR $NO_X$ Ozone Season allowances required for deduction under 40 CFR 96.354(d)(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 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 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 certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR $NO_X$ Ozone Season 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 shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR $NO_X$ Ozone Season Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR $NO_X$ Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR $NO_X$ Ozone Season Trading Program.
(2) The CAIR designated representative of a CAIR $NO_X$ Ozone Season source and each CAIR $NO_X$ Ozone Season unit at the source shall submit the reports required under the CAIR $NO_X$ Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

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 Trading Program.
(2) Any provision of the CAIR $NO_X$ Ozone Season Trading Program that applies to a CAIR $NO_X$ Ozone Season source or the CAIR designated representative of a CAIR $NO_X$ Ozone Season source shall also apply to the owners and operators of such source and of the CAIR $NO_X$ Ozone Season units at the source.
(3) Any provision of the CAIR $NO_X$ Ozone Season Trading Program that applies to a CAIR $NO_X$ Ozone Season unit or the CAIR designated representative of a CAIR $NO_X$ Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR $NO_X$ Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 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 $NO_X$ Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**STEP 4**

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

**Certification (for designated representative or alternate designated representative only)**

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 with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name **Edward Garcia** | Title **Director of Generation** |
| Company Owner Name **Keys Energy Services** | |
| Phone **305-295-1134** | E-mail Address **Edward.garcia@keysenergy.com** |
| Signature [signature] | Date 3/26/09 |

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## SECTION VI. APPENDICES.

**The Following Appendices Are Enforceable Parts of This Permit:**

Appendix A, Glossary.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NSPS, Subpart A, General Provisions.
Appendix NSPS, Subpart GG, Stationary Gas Turbines.
Appendix NESHAP, Subpart A, General Provisions.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions (version 2/16/12).
Appendix U, List of Unregulated Emissions Units and/or Activities.