

# Duke Energy Florida, LLC

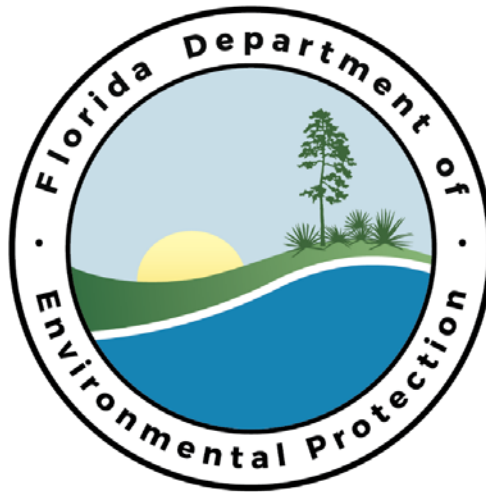
## Intercession City Plant

Facility ID No. 0970014  
Osceola County

### Title V Air Operation Permit Renewal

**Permit No. 0970014-018-AV**

(Renewal of Title V Air Operation Permit No. 0970014-016-AV)



#### **Permitting Authority:**

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
Office of Permitting and Compliance  
2600 Blair Stone Road  
Mail Station #5505  
Tallahassee, Florida 32399-2400  
Telephone: (850) 717-9000  
Email: DARM\_Permitting@dep.state.fl.us

#### **Compliance Authority:**

Department of Environmental Protection  
Central District Office  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767  
Telephone: (407) 897-4100  
Email (preferred): DEP\_CD@dep.state.fl.us

## Title V Air Operation Permit Renewal

Permit No. 0970014-018-AV

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# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Carlos Lopez-Cantera  
Lt. Governor

Noah Valenstein  
Secretary

## **PERMITTEE:**

Duke Energy Florida, LLC  
6525 Osceola Polk Line Road  
Intercession City, Florida 33848

Permit No. 0970014-018-AV  
Intercession City Plant  
Facility ID No. 0970014  
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Intercession City Plant is in Osceola County at 6525 Osceola Polk Line Road, Intercession City, Florida. UTM Coordinates are: Zone 17, 446.3 kilometers (km) East, 3,126 km North. Latitude is 28° 15' 38" North, and longitude is 81° 32' 51" 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.

Executed in Tallahassee, Florida.

0970014-018-AV Effective Date: December 28, 2017

Renewal Application Due Date: May 17, 2022

Expiration Date: December 28, 2022

*For:*

Syed Arif, P.E., Program Administrator  
Office of Permitting and Compliance  
Division of Air Resource Management

SA/dlr/jpd

## SECTION I. FACILITY INFORMATION.

### **Subsection A. Facility Description.**

This existing facility is a nominal 1,169 megawatt (MW) power plant that consists of fourteen simple-cycle intermittent duty combustion turbines (CTs) firing natural gas or distillate oil. All of the CTs are considered to be peaking units used during periods of greatest daily demand.

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

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Simple Cycle Combustion Turbine Unit No. 1
002	Simple Cycle Combustion Turbine Unit No. 2
003	Simple Cycle Combustion Turbine Unit No. 3
004	Simple Cycle Combustion Turbine Unit No. 4
005	Simple Cycle Combustion Turbine Unit No. 5
006	Simple Cycle Combustion Turbine Unit No. 6
007	Simple Cycle Combustion Turbine Unit No. 7
008	Simple Cycle Combustion Turbine Unit No. 8
009	Simple Cycle Combustion Turbine Unit No. 9
010	Simple Cycle Combustion Turbine Unit No. 10
011	Simple Cycle Combustion Turbine Unit No. 11
018	Simple Cycle Combustion Turbine Unit No. 12
019	Simple Cycle Combustion Turbine Unit No. 13
020	Simple Cycle Combustion Turbine Unit No. 14
021	Fire Pump (Diesel) – 235 HP

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

### **Subsection C. Applicable Regulations.**

Based on the Title V air operation permit renewal application received May 19, 2017, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (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).
<i>Federal Rule Citations</i>	
40 CFR 60, Subpart A, NSPS General Provisions	007, 008, 009, 010, 011, 018, 019, 020
40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines	007, 008, 009, 010, 011, 018, 019, 020
40 CFR 63, Subpart A, NESHAP General Provisions	021
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines	021

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**SECTION I. FACILITY INFORMATION.**

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40 CFR 75, Acid Rain Monitoring Provisions	007, 008, 009, 010, 011, 018, 019, 020
<i>State Rule Citations</i>	
Rule 62-4, Florida Administrative Code (F.A.C.) (Permitting Requirements)	All
Rule 62-204, F.A.C. (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	All
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	All
Rule 62-212, F.A.C. (Preconstruction Review, PSD Review and Best Available Control Technology (BACT))	007, 008, 009, 010, 011, 018, 019, 020
Rule 62-213, F.A.C. (Title V Air Operation Permits for Major Sources of Air Pollution)	All
Rule 62-214, F.A.C. (Requirements for Sources Subject to The Federal Acid Rain Program)	007, 008, 009, 010, 011, 018, 019, 020
Rule 62-296, F.A.C. (Emission Limiting Standards)	All
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)	All

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## SECTION II. FACILITY-WIDE CONDITIONS.

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

**FW1. Appendices.** The permittee shall comply with all documents identified in Section V, 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. [Rule 62-296.320(1), F.A.C.]

*{Permitting Note: Nothing is deemed necessary and ordered at this time.}*

**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. 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. Maintenance of paved areas as needed.
- b. Regular mowing of grass and care of vegetation.
- c. Limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 19, 2017]

### **Reports and Fees**

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

**FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection’s Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP’s Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source’s most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee

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## SECTION II. FACILITY-WIDE CONDITIONS.

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that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1<sup>st</sup> of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available 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>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

*{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at [eaor@dep.state.fl.us](mailto:eaor@dep.state.fl.us).}*

*{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}*

**FW7. 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 and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303  
Attn: Air Enforcement Branch

**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 electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www2.epa.gov/rmp>. The RMP Reporting Center can be contacted at: 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]

**FW8. Semi-Annual Monitoring Reports.** The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.]

*{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}*

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection A. EU Nos. 001 – 006: Simple-Cycle Combustion Turbine Unit Nos. 1 – 6

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

E.U. ID No.	Brief Description
001	Simple Cycle Combustion Turbine Unit No. 1
002	Simple Cycle Combustion Turbine Unit No. 2
003	Simple Cycle Combustion Turbine Unit No. 3
004	Simple Cycle Combustion Turbine Unit No. 4
005	Simple Cycle Combustion Turbine Unit No. 5
006	Simple Cycle Combustion Turbine Unit No. 6

The combustion turbine (CT) Unit Nos. 1 - 6, all of which are pre-NSPS emissions units, shall only fire new No. 2 fuel oil having a maximum sulfur content of 0.5 percent, by weight. The CT Unit Nos. 1 - 6 were manufactured by Pratt & Whitney (Model FT 4C-1DLF). Each CT has a maximum heat input of 708 MMBtu/hour and each turbine has a power generator rated at 56.7 MW (megawatts) of electricity. Air pollutant emissions from each CT are not controlled and each turbine exhausts through a separate stack.

The CT Unit Nos. 1 - 6 began commercial service on May 14, 1974.

The individual stack parameters for CT Unit Nos. 1 - 6 are identical: height, 45 feet; diameter, 14.63 feet; exit temperature, 760 degrees F; and, actual stack gas flow rate, 1,764,000 acfm.

*{Permitting note(s): CT Unit Nos. 1 - 6 are regulated under Rule 62-210.300, F.A.C., Permits Required and 40 CFR 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. These emissions units are not regulated under 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}*

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

- A.1. Hours of Operation.** The hours of operation of these units are not limited. [Rule 62-210.200 (PTE), F.A.C.]
- A.2. Permitted Capacity.** CT Unit Nos. 1 - 6 each have a maximum heat input of 708 MMBtu/hour and each power a generator rated at 56.7 MW (megawatts) of electricity. [Rules 62-4.160(2) and 62-210.200 (Definitions - PTE), F.A.C.]
- A.3. 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.]
- A.4. Methods of Operation – Fuels.** Only No. 2 fuel oil with a sulfur content of 0.5 percent or less by weight may be fired in these turbines. [Permit No. 0970014-017-AC]

#### **Emission Limitations and Standards**

Unless otherwise specified, the averaging time for Specific Condition **A.5.** is based on the specified averaging time of the applicable test method.

- A.5. Visible Emissions.** Visible emissions (VE) from each turbine shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]

#### **Excess Emissions**

- A.6. 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(1), F.A.C.]



### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection A. EU Nos. 001 – 006: Simple-Cycle Combustion Turbine Unit Nos. 1 – 6

- A.7. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided (1) best practices to minimize emissions are adhered to and (2) 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. [Rule 62-210.700(1), F.A.C.]
- A.8. Best Operational Practices to Minimize Excess Emissions.** The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown. [Rule 62-213.440(1) (Operational Requirements that Assure Compliance), F.A.C.]

#### **Monitoring of Operations**

- A.9. Fuel Sulfur Monitoring.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. [Permit No. 0970014-017-AC]

#### **Test Methods and Procedures**

- A.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.]
- A.11. Test Methods.** If required, tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C.]

- A.12. Fuel Sulfur Content.** The fuel sulfur content, percent by weight, provided by the vendor or permittee for each delivery of liquid fuels shall be evaluated using either ASTM D1552-90, ASTM D2622-94, ASTM D4294-90(95), or both ASTM D4057-88 and ASTM D129-91(95), or the respective successor ASTM method(s). [Rule 62-297.440, F.A.C.; Permit No. 0970014-017-AC]
- A.13. Annual Compliance Test.** Emissions compliance testing for VE is required only in calendar years (January 1 to December 31) during which operation of that unit exceeds 400 hours. [Rules 62-297.310(8)(a)3 and 62-297.310(8)(b)3.c., F.A.C.]

#### **Recordkeeping and Reporting Requirements**

- A.14. Reporting Schedule.** The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	<b>A.15.</b>

[Rule 62-210.700(6), F.A.C.]

- A.15. Excess Emissions from Malfunctions.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Compliance Authority 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 Compliance Authority. [Rule 62-210.700(5), F.A.C.]
- A.16. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection A. EU Nos. 001 – 006: Simple-Cycle Combustion Turbine Unit Nos. 1 – 6

##### **NESHAP 40 CFR 63 Subpart A & Subpart YYYYY Requirements**

**A.17.** NESHAP 40 CFR 63 Requirements - Subparts A and YYYYY. These emissions units are subject to 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., and 40 CFR 63, Subpart YYYYY, National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, which have been adopted by reference in Rule 62-204.800(11)(b)81., F.A.C. These units are classified as “existing stationary combustion turbines” under Subpart YYYYY; therefore, they have no applicable requirements from these Subparts. [Rules 62-204.800(11)(d)1 and 62-204.800(11)(b)81, F.A.C.; 40 CFR 63.6090(b)(4)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection B. EU Nos. 007 – 011 and 018 – 020: Simple-Cycle Combustion Turbine Units 7 – 14

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

EU No.	Brief Description
007	Simple Cycle Combustion Turbine Unit No. 7
008	Simple Cycle Combustion Turbine Unit No. 8
009	Simple Cycle Combustion Turbine Unit No. 9
010	Simple Cycle Combustion Turbine Unit No. 10
011	Simple Cycle Combustion Turbine Unit No. 11
018	Simple Cycle Combustion Turbine Unit No. 12
019	Simple Cycle Combustion Turbine Unit No. 13
020	Simple Cycle Combustion Turbine Unit No. 14

##### CT Unit Nos. 7 - 10

The combustion turbine (CT) Unit Nos. 7 - 10 are fired by natural gas or new No. 2 fuel. The CT Unit Nos. 7 - 10 were manufactured by General Electric (Model PG7111EA). Each CT has an approximate maximum heat input of 1,150 MMBtu/hour (varying with ambient conditions) based on No. 2 fuel oil, and each turbine has a power generator rated at 96.3 MW (megawatts) of electricity. Inlet foggers are installed on the CT Unit Nos. 7 - 10. Air pollutant emissions from each of the CT Unit Nos. 7 - 10 are controlled by water injection when firing new No. 2 fuel oil, and each turbine exhausts through a separate stack.

The CT Unit Nos. 7 - 10 began commercial service on August 19, 1993; July 13, 1993; September 2, 1993; and, July 19, 1993; respectively. The individual stack parameters for CT Unit Nos. 7 - 10 are identical: height, 50 feet; diameter, 13.75 feet; exit temperature, 1,043 degrees F; and, actual stack gas flow rate, 1,551,317 acfm.

##### CT Unit No. 11

The combustion turbine (CT) Unit No. 11 is fired by natural gas or new No. 2 fuel oil. The CT Unit No. 11 was manufactured by Siemens (Model V84.3). The CT Unit No. 11 has a maximum heat input of 2,032 MMBtu/hour based on new No. 2 fuel oil and the turbine has a power generator rated at 171 MW of electricity. Air pollutant emissions from the CT Unit No. 11 are controlled by water injection when firing new No. 2 fuel oil.

The CT Unit No. 11 began commercial service on January 1, 1997. The stack parameters for CT Unit No. 11 are: height, 75 feet; diameter, 19 feet; exit temperature, 1,043 degrees F; and, actual stack gas flow rate, 2,370,627 acfm.

##### CT Unit Nos. 12 – 14

These emissions units, CT Unit Nos. 12 - 14, are dual-fuel, nominal 91 megawatt (MW) General Electric Model PG7121(7EA) combustion turbine (CT)-electrical generators with evaporative inlet coolers. The combustion turbine units can operate in simple cycle mode and intermittent duty mode. The CT units are fueled primarily with pipeline natural gas, with distillate (No. 2) fuel oil used as a back-up fuel. The CT units were designed and constructed with dry low NOx (DLN) burner technology and water injection capability for the control of nitrogen oxides (NOx) emissions. A continuous emissions monitoring system (CEMS) monitors NOx emissions from the combustion turbines. The advanced burner design reduces incomplete combustion and minimizes carbon monoxide (CO), particulate matter (PM/PM<sub>10</sub>), and volatile organic compound (VOC) emissions. The use of inherently clean fuels and good operating practices also reduces air pollutant emissions.

E.U. ID Nos. 018, 019 & 020 began operation on March 1, 2001. The stack parameters for E.U. ID Nos. 018, 019 & 020 are identical: height, 56 feet; diameter, 16.1 feet; exit temperature, 993 degrees F; and, actual stack gas flow rate, 1,436,310 acfm.

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection B. EU Nos. 007 – 011 and 018 – 020: Simple-Cycle Combustion Turbine Units 7 – 14

*{Permitting notes: These emissions units are regulated under Acid Rain, Phase II; 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; 40 CFR 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-180 and 268, as amended]; and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated December 9, 1999. These emissions units are exempt from Compliance Assurance Monitoring (CAM) due to the use of NO<sub>x</sub> CEMS for continuous compliance.}*

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

**B.1. Permitted Capacities.** EU Nos. 007 through 010, EU No. 011, and EU Nos. 018 through 020 combustion turbines have generator nameplate ratings of 96.3, 171, and 91 MW, respectively. The heat input limitations for these turbines are given in the following table. The basis for the heat input limitations is the lower heating value (LHV).

	EU Nos. 007 – 010		EU No. 011		EU Nos. 018 – 020	
Temperature, °F	Natural Gas, MMBtu/hr/unit	Fuel Oil, MMBtu/hr/unit	Natural Gas, MMBtu/hr	Fuel Oil, MMBtu/hr	Natural Gas, MMBtu/hr	Fuel Oil, MMBtu/hr
20	1,159	1,144	1,609	2,032		
59	1,048	per heat input vs. ambient temperature curve	1,477	1,886	905	978
90	955		1,355	1,708		

Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The permittee shall provide performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities upon request. Compliance shall be determined by data compiled from the Gas Turbine Control System adjusted for these parameters. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file. [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.2. (Units 12 – 14) Load Restriction.** Other than during startup and shutdown, operation of Units 12 through 14 (EU Nos. 018 through 020) below 50% load is prohibited. [Permit No. 0970014-017-AC/PSD-FL-268C]

**B.3. Simple Cycle Operation Only.** The combustion turbines shall operate only in simple cycle mode. This requirement is based on the permittee's request, which formed the basis of the NO<sub>x</sub> BACT determinations and resulted in the specified emission standards. Specifically, the NO<sub>x</sub> BACT determination eliminated several control alternatives based on technical considerations and costs due to the elevated temperatures of the exhaust gas. Any request to convert these units to combined cycle operation by installing a new heat recovery steam generator or connecting to an existing heat recovery steam generator shall require the permittee to perform a new, current NO<sub>x</sub> BACT analysis and the approval of the Department through a permit modification. The results of this analysis may validate the initial BACT determinations or result in the submittal of a full PSD permit application, new control equipment, and new emissions standards. [Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**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.]

**B.5. Methods of Operation - Fuels & Inlet Foggers.**

a. *Units 7 – 11 (EU Nos. 007 – 011).*

(1) *Fuels.* Only natural gas or No. 2 fuel oil having a maximum sulfur content of 1 grain per 100 dscf and 0.16% or less, by weight, respectively, may be fired in these combustion turbines.

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(2) *Inlet Foggers.* The inlet foggers installed at the compressor inlet to each of the four simple cycle combustion turbines (CT Unit Nos. 7 - 10) may operate up to 7,000 hours per year in aggregate (average 1,750 hours per unit per year).

- b. *Units 12-14 (EU Nos. 018-020).* Each combustion turbine shall be fired by pipeline natural gas containing no more than 1 grain of sulfur per 100 dry standard cubic feet of gas. As a backup fuel, each combustion turbine may be fired with No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. Each unit shall be capable of firing natural gas. Compliance with the limits on fuel sulfur content shall be demonstrated by the record keeping requirements specified in this permit.

*{Permitting note: These sulfur restrictions are much more stringent than the NSPS sulfur dioxide limitation and assure compliance with 40 CFR 60.333 and 60.334.}*

[Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.6. Hours of Operation.** Total turbine operating hours are the sum of operating hours when firing gas and operating hours when firing oil. The permittee shall calibrate, operate, and maintain meters to measure and record the amount of each fuel fired and hours of operation for each combustion turbine.

- a. *Units 7 – 11 (EU Nos. 007 – 011).* The maximum cumulative hours of operation for any combination of these five CTs is 16,950 hours/calendar year (based on an average 3,390 hours/year/CT, an average capacity factor of 38.7%, 59 °F, and at peak load).

- b. *Units 12 – 14 (EU Nos. 018-020).*

(1) *Operating Hours.* The total turbine operating hours shall not exceed 10,170 hours during any consecutive 12 months.

(2) *Oil Firing.* Each gas turbine is limited to no more than 1,000 turbine operating hours of oil firing during any consecutive 12 months. In addition, the group of three gas turbines is limited to no more than 2,500 turbine operating hours of oil firing during any consecutive 12 months.

[Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

#### **Air Pollution Control Technologies and Measures**

**B.7. Nitrogen Oxides Control.** Nitrogen oxides from the combustion turbines shall be controlled by water injection when firing new No. 2 fuel oil. Additionally, emissions from Units 7 – 11 (EU Nos. 007 – 011) shall be controlled by water injection when firing natural gas. [Rules 62-210.650 and 62-212.400 (BACT), F.A.C.]

**B.8. Automated Control System.** In accordance with the manufacturer's recommendations, the permittee shall calibrate, tune, operate, and maintain the gas turbine control system for each combustion turbine. Each system shall be operated to monitor and control the gas turbine combustion process and operating parameters. [Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.9. Combustion Controls.** The permittee shall employ good operating practices in accordance with the manufacturer's recommended operating procedures to control CO, NOx, and VOC emissions. [Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.10. Operating Procedures.** All operators and supervisors shall be properly trained to operate and maintain the combustion turbines and pollution control devices in accordance with the guidelines and procedures established by each equipment manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.11. (Units 12 – 14) Dry Low NOx (DLN) Combustion Technology.** To control NOx emissions when firing natural gas on CT Units Nos. 12-14 (EU Nos. 018 – 020), the permittee shall tune, operate and maintain a

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DLN combustion system for each combustion turbine in accordance with the manufacturer's recommendations. [Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/268C]

#### **Emission Limitations and Standards**

Unless otherwise specified, the averaging times for these emission limits are based on the specified averaging time of the applicable test method.

#### **B.12. Nitrogen Oxides (NO<sub>x</sub>)**

- a. Compliance with the following emission limits for NO<sub>x</sub> shall be demonstrated by the continuous emissions monitoring systems (CEMS) for NO<sub>x</sub>, on a 24-hour block average.

(1) *Natural Gas Operation.*

- i. *Units 7 – 10 (EU Nos. 007 – 010).* NO<sub>x</sub> emissions may exceed neither 25 parts per million by volume, dry, corrected to 15% O<sub>2</sub> (ppmvd @ 15% O<sub>2</sub>), nor 107 lb/hr.
- ii. *Unit 11 (EU No. 011).* NO<sub>x</sub> emissions may exceed neither 25 ppmvd @ 15% O<sub>2</sub>, nor 149 lb/hr.
- iii. *Units 12 – 14 (EU Nos. 018 – 020).* NO<sub>x</sub> emissions may not exceed 10.0 ppmvd @ 15% O<sub>2</sub>.

(2) *Fuel Oil Operation.*

- i. *Units 7 – 10 (EU Nos. 007 – 010).* NO<sub>x</sub> emissions may exceed neither 42 ppmvd @ 15% O<sub>2</sub>, nor 182 lb/hr.
- ii. *Unit 11 (EU No. 011).* NO<sub>x</sub> emissions may exceed neither 42 ppmvd @ 15% O<sub>2</sub>, nor 334 lb/hr.
- iii. *Units 12 – 14 (EU Nos. 018 – 020).* NO<sub>x</sub> emissions may not exceed 42.0 ppmvd @ 15% O<sub>2</sub>.

- b. Compliance with the following emission limits for NO<sub>x</sub> for Units 12 – 14 (EU Nos. 018 – 020) shall be demonstrated by annual 3-hour compliance test.

(1) *Natural Gas Operation.* NO<sub>x</sub> emissions may exceed neither 9.0 ppmvd @ 15% O<sub>2</sub>, nor 33.0 lb/hr.

(2) *Fuel Oil Operation.* NO<sub>x</sub> emissions may exceed neither 42.0 ppmvd @ 15% O<sub>2</sub>, nor 169.0 lb/hr.

[Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

#### **B.13. Sulfur Dioxide (SO<sub>2</sub>) and Sulfuric Acid Mist (SAM):** Emissions of SO<sub>2</sub> and SAM shall be limited by firing only fuels meeting the sulfur restrictions in Specific Condition **B.5**. [Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

*{Permitting note: Compliance with these sulfur content limits assures compliance with the NSPS 40 CFR 60 Subpart GG limit.}*

#### **B.14. Particulate Matter (PM)**

- a. *Units 7 – 11 (EU Nos. 007 – 011).* Compliance with the Visible Emission standard is used as a proxy for compliance with these PM limits. No PM testing is required unless a VE test indicates an exceedance of the VE standard, in accordance with Specific Condition **B.29**.

(1) *Natural Gas Operation.* PM emissions from each individual CT while burning natural gas shall not exceed 7.50 lb/hr.

(2) *Fuel Oil Operation.* PM emissions from each individual CT while burning fuel oil shall not exceed any of the following limits:

- i. *EU Nos. 007 – 010:* 0.01 lb/MMBtu, nor 15 lb/hr
- ii. *EU No. 011:* 0.01 lb/MMBtu, nor 17 lb/hr

- b. *Units 12 – 14 (EU Nos. 018 – 020).* Emissions of PM and PM<sub>10</sub> shall be limited by the good combustion techniques and the fuel sulfur limitations specified in this permit. Compliance with the Visible Emission standard is used as a proxy for compliance with the PM limits.

[Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

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**B.15. Volatile Organic Compounds (VOC).** Compliance with the carbon monoxide (CO) limits is used as a proxy for compliance with the VOC limits. No VOC testing is required unless a CO test indicates an exceedance of the CO standard, in accordance with Specific Condition **B.29**.

a. *Natural Gas Operation.* Emissions of VOC from each CT shall not exceed the following:

- (1) *Units 7 – 10 (EU Nos. 007 – 010).* 3.0 lb/hr
- (2) *Unit 11 (EU No. 011).* 5.3 lb/hr
- (3) *Units 12 – 14 (EU Nos. 018 – 020).* 2.0 lb/hr, nor 2.0 ppmvd @ 15% O<sub>2</sub>. The VOC emissions shall be measured and reported as methane.

b. *Fuel Oil Operation.* Emissions of VOC from each CT shall not exceed the following:

- (1) *Units 7 – 10 (EU Nos. 007 – 010).* 5.0 lb/hr
- (2) *Unit 11 (EU No. 011).* 9.0 lb/hr
- (3) *Units 12 – 14 (EU Nos. 018 – 020).* 5.0 lb/hr, nor 4.0 ppmvd @ 15% O<sub>2</sub>. The VOC emissions shall be measured and reported as methane.

[Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.16. Carbon Monoxide (CO).**

a. *Natural Gas Operation.* Emissions of CO from each CT shall not exceed the following:

- (1) *Units 7 – 10 (EU Nos. 007 – 010).* 21.3 lb/hr
- (2) *Unit 11 (EU No. 011).* 30.9 lb/hr
- (3) *Units 12 – 14 (EU Nos. 018 – 020).* 43.0 lb/hr, nor 20.0 ppmvd @ 15% O<sub>2</sub>.

b. *Fuel Oil Operation.* Emissions of CO from each CT shall not exceed the following:

- (1) *Units 7 – 10 (EU Nos. 007 – 010).* 54.0 lb/hr, nor 25 ppmvd @ 15% O<sub>2</sub>.
- (2) *Unit 11 (EU No. 011).* 79.0 lb/hr, nor 25 ppmvd @ 15% O<sub>2</sub>.
- (3) *Units 12 – 14 (EU Nos. 018 – 020).* 44.0 lb/hr nor 20.0 ppmvd @ 15% O<sub>2</sub>.

[Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.17. Visible Emissions (VE).** VE from each CT shall not exceed 10 percent opacity. [Rule 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

#### **Excess Emissions**

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

**B.18. Excess Emissions.** Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]

**B.19. Alternate Standards and NO<sub>x</sub> CEMS Data Exclusion.** The following permit conditions establish alternate standards or allow the exclusion of monitoring data for specifically defined periods of startup, shutdown, and documented malfunction of a gas turbine. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of emissions during such episodes.

- a. *Opacity.* During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to 120 minutes in any 24-hour calendar day period per CT. Stack tests to demonstrate compliance with this limit are not required.
- b. *NO<sub>x</sub> CEMS Data Exclusion.* For the following identified operational periods, limited amounts of NO<sub>x</sub> emissions data may be excluded from the 24-hour block compliance averages in accordance with the corresponding requirements.

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- (1) *Startup, Shutdown, and Malfunction.* No more than 60 minutes of data due to startup shall be excluded per cycle per CT. No more than 60 minutes of data due to shutdown shall be excluded per cycle per CT. No more than 120 minutes of data shall be excluded in a 24-hour calendar day period due to malfunction per CT. No more than 240 minutes of data shall be excluded in a 24-hour calendar day period per CT due to all startups, shutdowns, and malfunctions. Note: A fuel-switch is not considered “startup.”
- (2) *Tuning.* If the permittee provides advance notice prior to a major tuning session performed by the manufacturer’s representative, hourly NO<sub>x</sub> emissions rate values during tuning may be excluded from the 24-hour block compliance averages. Data excluded due to tuning shall not count towards the limit on total excluded data in a 24-hour period.
- (3) *Full-Speed No-Load Testing.* As a periodic maintenance practice, the permittee may perform full-speed no-load tests with the combustion turbine generator in accordance with the manufacturer’s recommendations (or industry standards). An example of work that may require full-speed no-load testing includes, but is not limited to, testing and commissioning of synchronizing instrumentation, transformers and generation equipment to assure safe and reliable connection to the bulk electric system. Hourly NO<sub>x</sub> emissions rate values during full-speed no-load testing may be excluded from the 24-hour block compliance averages. Data excluded due to full-speed no-load testing shall not count towards the limit on total excluded data in a 24-hour period.

[Rules 62-210.700(5), 62-212.400 (BACT), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

#### **Continuous Monitoring Requirements**

**B.20. NO<sub>x</sub> CEMS Requirements.** For each gas turbine, the permittee shall install, calibrate, maintain, and operate continuous emissions monitors (CEMS) to measure and record emissions of nitrogen oxides (NO<sub>x</sub>) and oxygen (O<sub>2</sub>) in a manner sufficient to demonstrate compliance with the standards of this permit. A monitor for carbon dioxide (CO<sub>2</sub>) may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. Each monitor shall be installed in a location that will provide emissions measurements representative of actual stack emissions. Each CEMS shall comply with the corresponding performance specifications that identify location, installation, design, performance, and reporting requirements.

- a. *NO<sub>x</sub> Monitors.* Each NO<sub>x</sub> monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NO<sub>x</sub> monitor shall be performed using EPA Method 7E in Appendix A of 40 CFR 60.
- b. *Diluent Monitors.* The oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas shall be monitored at the location where NO<sub>x</sub> is monitored to correct the measured emissions rates to 15% oxygen. If a CO<sub>2</sub> monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Rules 62-4.130 and 62-4.160(8), F.A.C.; 40 CFR 60.7]

#### **B.21. CEMS Data Requirements for BACT Standards.**

- a. *Data Collection.* Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be



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expressed as ppmvd of NO<sub>x</sub> corrected to 15% oxygen. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for NO<sub>x</sub> as specified in this section. For purposes of determining compliance with the CEMS emissions standards of this section, missing (or excluded) data shall not be substituted. Upon request by the Department, the NO<sub>x</sub> emission rate shall be corrected to ISO (International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure)) conditions to demonstrate compliance with the applicable Subpart GG standards of 40 CFR 60.332.

- b. *Valid Hour.* Hourly average values shall begin at the top of each hour. During each full operating hour, each monitor must complete a minimum of cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour to validate the hour. For partial unit operating hours in which quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points, separated by a minimum of 15 minutes (one data point in each of two separate quadrants), are required to validate the hour. All valid measurements or data points collected during an hour shall be used to calculate the hourly average value.
- c. *24-Hour Block Averages.* Compliance with the 24-hour block NO<sub>x</sub> emissions standards shall be based on data collected by each required CEMS. The 24-hour block shall start at midnight of each operating day and consist of 24 consecutive one-hour blocks. If a unit operates less than 24 hours during the day, or has less than 24 valid one-hour emission averages, the 24-hour block average shall be the average of the available valid 1-hour emission averages collected during actual operation. If monitoring data is authorized for exclusion (due to startup, shutdown, malfunction, tuning, full speed no load testing), the 24-hour block average shall be the average of the remaining valid one-hour emission averages collected during actual operation. In cases of reduced operation or data exclusion, the compliance average will be based on fewer than 24 one-hour emission averages. Upon completion of each 24-hour block, the permittee shall determine separate compliance averages for gas firing and oil firing. A 1-hour emissions average that includes any amount of oil firing shall only be included in the compliance average for oil firing.
- d. *Data Exclusion.* Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall record emissions data at all times including episodes of startup, shutdown, tuning, full speed no load testing, and malfunction. Emissions data recorded during periods of startup, shutdown, tuning, full speed no load testing or malfunction may only be excluded from the compliance averages in accordance with the requirements specified in this permit. All periods of data excluded shall be consecutive for each episode and only data obtained during the described episodes (startup, shutdown, malfunction, tuning, full speed no load testing) may be used for the appropriate exclusion periods. To the extent practicable, the permittee shall minimize the duration of data excluded for startup, shutdown and malfunctions. Data recorded during startup, shutdown or malfunction shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during startup, shutdown and malfunction. Excluded emissions data shall be summarized in the required excess emissions report.
- e. *Reporting.* If a CEMS reports NO<sub>x</sub> emissions in excess of a standard, the permittee shall notify the Compliance Authority within one working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Compliance Authority may request a written summary report of the incident.
- f. *Monitor Availability.* Monitor availability shall not be less than 95% in any calendar quarter in which the unit operated for a minimum of 168 hours. In the event 95% availability is not achieved in a calendar quarter with at least 168 operating hours, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor

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availability shall be violations of this permit.

[40 CFR 60.7; Rule 62-4.160(8), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.22. Continuous Compliance with the NO<sub>x</sub> Emission Limits:** Continuous compliance with the NO<sub>x</sub> emission limits shall be demonstrated with the CEMS based on the applicable averaging time of 24-hr block average.

[Rule 62-212.400 (BACT), F.A.C.; 40 CFR 64.2(b)(vi); Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.23. CEMS in lieu of Water-to-Fuel Ratio:** The NO<sub>x</sub> CEMS may be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(b), Subpart GG. The calibration of the water/fuel monitoring device required in Subpart GG be replaced by the 40 CFR 75 certification tests of the NO<sub>x</sub> CEMS. [40 CFR 60.334(b)(1) and 60.334(b)(3)(ii)]

**B.24. Continuous Monitoring Certification and Quality Assurance Requirements.** The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. [Rule 62-213.440, F.A.C.; 40 CFR 75]

#### **Monitoring Requirements**

**B.25. Sulfur and Nitrogen Content Monitoring.** The owner or operator shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine in accordance with Subpart GG. The owner or operator may elect not to monitor the sulfur content of the natural gas fuel if the gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the gas specifies that the maximum sulfur content of the fuel is 20.0 grains per 100 scf or less. Fuel analyses may be performed by the owner or operator, a service contractor, the fuel vendor, or any other qualified agency. The frequency of determination of these values shall be as follows:

- a. If the turbine is supplied its fuel oil from a 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 Administrator before they can be used to comply with 40 CFR 60.334(b).
- c. Alternatively, the owner or operator may use representative fuel sampling data which show that the sulfur content of the fuels is 20.0 grains/100 scf or less, determined in accordance with 40 CFR 75, Appendix D. [40 CFR 60.334(h)(3)(i) & (ii), 60.334(i)(1) & (2), and 60.335(b)(11)]

*{Permitting note: Due to the negligible amount of fuel-bound nitrogen in natural gas and distillate oil, the permittee does not plan to use the fuel-bound nitrogen adjustment available in Subpart GG. Therefore, there is no need to conduct analyses of fuel-bound nitrogen.}*

**B.26. (Units 7 – 10 and 12 – 14) Humidity Sensor Calibration.** Each calendar year, the owner or operator shall conduct a calibration of the humidity sensor associated with each unit, as applicable. [Consent Order OGC File No. 12-1814]

*{Permitting note: Unit 11 is not equipped with a humidity sensor.}*

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##### Test Methods and Procedures

**B.27. 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.28. Test Methods.** If required, tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 5, 17, 201A or 202	Methods for Determining PM Emissions
Appendix D, 40 CFR 75	Optional SO <sub>2</sub> Emissions Data Protocol for Gas-Fired and Oil-Fired Units
EPA Method 7, 7A, 7C, 7D or 7E	Determination of NO <sub>x</sub> Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)
EPA Method 10	Determination of CO Emissions
EPA Method 20	Determination of NO <sub>x</sub> , SO <sub>2</sub> and Diluent Emissions from Stationary Gas Turbines
EPA Method 18, 25 and/or 25A	Measurement of Gaseous Organic Compound Emissions (VOC)

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C.]

**B.29. Annual Compliance Tests Required.**

- All Units.* During each calendar year (January 1 to December 31), each CT shall be tested to demonstrate compliance with the emission limitations for CO and VE for natural gas operation. An annual test for CO and VE shall also be performed while firing fuel oil, on each CT that has fired fuel oil for more than 400 hours during the calendar year. VOC testing is only required if the CO test indicates an exceedance of the standard.
- Units 7 – 11 (EU Nos. 007 – 011).* PM testing is only required if the VE test indicates an exceedance of the standard.
- Units 12 – 14 (EU Nos. 018 – 020).* During each calendar year, each CT shall be tested to demonstrate compliance with the 3-hour emissions limitations for NO<sub>x</sub> for natural gas operation. The NO<sub>x</sub> RATA test data may be used to demonstrate compliance with the annual test requirement, provided the testing requirements (notification, procedures and reporting) of Chapter 62-297, F.A.C. are met. An annual test for NO<sub>x</sub> shall also be performed while firing fuel oil, on each CT that has fired fuel oil for more than 400 hours during the calendar year. For oil firing, compliance with the NO<sub>x</sub> standards may be determined by the NO<sub>x</sub> CEMS data collected during the required CO test.

[Rule 62-297.310(8), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.30. Operating Rate During Testing:** Testing of emissions 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 compressor inlet temperature during the test (with 100 percent represented by a curve depicting heat input vs. compressor inlet temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. compressor inlet temperature curve downward by an

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increment equal to the difference between the maximum permitted heat input (corrected for compressor 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 60 days for the purposes of additional compliance testing to regain the permitted capacity. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. [Rule 62-297.310(3), F.A.C.]

#### **Recordkeeping and Reporting Requirements**

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

**B.31. Reporting Schedule.** The following reports shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	<b>B.32.a</b>
BACT Quarterly Permit Limits Excess Emissions Report	Every 3 months (quarter)	<b>B.32.b</b>
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	<b>B.32.c</b>

[Rule 62-210.700(5), F.A.C.; 40 CFR 60, Subparts A & GG; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

#### **B.32. Excess Emissions Reports.**

- Malfunction Notification.* If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction, the permittee shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident in a quarterly report.
- BACT Quarterly Permit Limits Excess Emissions 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<sub>x</sub> emissions in excess of the BACT permit standards 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. The report shall also summarize all periods during which the fuel sulfur content exceeded the permitted limit. A summary of data excluded from BACT compliance calculations should also be provided.
- NSPS Semi-Annual Excess Emissions Reports.* Within 30 days following each calendar semi-annual period, the permittee shall submit a report on any periods of excess emissions of the applicable NSPS that occurred during the previous semi-annual period. In addition, the report shall summarize the CEMS systems monitor availability for the previous semi-annual period.

[Rules 62-4.130, 62-210.700(5), and 62-212.400 (BACT), F.A.C.; 40 CFR 60.7(c); Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

#### **B.33. Fuel Records:**

- Natural Gas:* The permittee shall demonstrate compliance with the SO<sub>2</sub> standards of this permit and in 40 CFR 60.333 by complying with the requirements in 40 CFR 75 Appendix D.
- Distillate Oil:* For all bulk shipments of distillate oil received at this facility, the permittee shall obtain an analysis identifying the sulfur content. An analysis provided by the fuel vendor is acceptable. Methods for determining the sulfur content of the distillate oil shall be ASTM D129-91, D2622-94, or D4294-90 or

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection B. EU Nos. 007 – 011 and 018 – 020: Simple-Cycle Combustion Turbine Units 7 – 14

equivalent methods. Records shall specify the test method used and shall comply with the requirements of 40 CFR 60.335(d).

[Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.34. Monthly Operations Summary:** By the fifteenth calendar day of each month, the owner or operator shall record the following information in a written or electronic log summarizing the previous month of operation and the previous 12 months of operation: hours of operation of inlet foggers (Units 7-10 only); hours of gas firing; quantity of gas fired; hours of oil firing; and, quantity of oil fired. The information shall be recorded for each individual CT, collectively for Units 7 – 11 (EU Nos. 007-011), and collectively for Units 12-14 (EU Nos. 018-020). Information may be recorded and stored as an electronic file, but must be available for inspection and/or printing at the request of the Compliance Authority. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.; Permit No. 0970014-017-AC/PSD-FL-180I and 268C]

**B.35. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

#### **NSPS 40 CFR 60 Requirements**

**B.36. NSPS Requirements - Subpart A.** This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

- 40 CFR 60.7, Notification and Recordkeeping
- 40 CFR 60.8, Performance Tests
- 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring Requirements
- 40 CFR 60.19, General Notification and Reporting Requirements,

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. This emissions unit shall comply with all applicable provisions of **Appendix 40 CFR 60 Subpart A** included with this permit, which includes applicable requirements that apply in general to all emission units regulated under 40 CFR 60, Subpart A. This appendix also contains useful information like definitions (see 40 CFR 60.2) and units and abbreviations (see 40 CFR 60.3). [Rule 62-204.800(8)(d), F.A.C.]

**B.37. NSPS Requirements - Subpart GG.** Except as otherwise provided in this permit, the combustion turbine shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies, but such correction is not required to demonstrate compliance with the non-NSPS permit standard(s). These emissions units shall comply with **Appendix 40 CFR 60 Subpart GG** attached to this permit. [Rule 62-204.800(8)(b)39., F.A.C.]

#### **NESHAP 40 CFR 63 Requirements**

**B.38. NESHAP 40 CFR 63 Requirements - Subparts A and YYYY.** These emissions units are subject to 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., and 40 CFR 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, which have been adopted by reference in Rule 62-204.800(11)(b)81., F.A.C. These units are classified as “existing stationary combustion turbines” under Subpart YYYY; therefore, they have no applicable requirements from these Subparts. [Rules 62-204.800(11)(d)1 and 62-204.800(11)(b)81, F.A.C.; 40 CFR 63.6090(b)(4)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection C. EU No. 021: Fire Pump (Diesel) – 208 HP

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

EU No.	Brief Description
021	Fire Pump (Diesel) – 208 HP

This emissions unit consists of nominal 208 horsepower diesel-fueled fire pump engine. The engine was ordered and installed in 1993.

The following table provides important details for this emissions unit:

Date Manufactured	Date ordered	Date Installed	Displacement liters/cylinder (L/c)	Model No.
1993 or earlier	1993	1993	Less than 10 L/c	Engine: Cummins 6BTA5.9-F

The stack parameters for this engine are as follows: stack height, 12 ft; stack diameter, 0.5 ft; discharge type, vertical with cap; exhaust exit temperature, 815 °F; exhaust flow rate, 953 acfm.

*{Permitting note: This CI RICE 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 a fire pump. This is a “existing” stationary fire pump CI RICE with a displacement of less than 10 liters per cylinder, located at a major source of HAP.}*

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

##### **C.1. Hours of Operation.**

- Emergency Situations.** There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- Maintenance and Testing.** Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 63.6640(f)(1)]
- Non-emergency Situations.** Each RICE is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(1)]
- Other Situations.** Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(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)]

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection C. EU No. 021: Fire Pump (Diesel) – 208 HP

#### **Emission Limitations and Operating Requirements**

*{Permitting note: These “existing” stationary CI engines with  $\leq 500$  HP do not have specific numerical emission limitations and standards.}*

#### **C.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 Table 2c(1)(a)]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(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 Table 2c(1)(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)]
- 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. 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)]

#### **Monitoring of Operations**

- C.3. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

#### **Compliance Requirements**

- C.4. Continuous Compliance.** Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]
- C.5. Operation and Maintenance of Equipment.** At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority 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(b)]

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection C. EU No. 021: Fire Pump (Diesel) – 208 HP

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#### **Recordkeeping Requirements**

##### **C.6. Notification, Performance and Compliance Records.**

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. The owner or operator must keep the records required in 40 CFR 63.6625(e) of this section to show continuous compliance with each emission limitation or operating requirement.
- c. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655]

##### **C.7. Malfunction Records.**

- a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
- b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655]

##### **C.8. Maintenance Records.**

- a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655]

##### **C.9. 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**

**C.10. Emergency Situation.** If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63.6602 Table 2c, footnote 1]

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**SECTION IV. ACID RAIN PART.**

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**Federal Acid Rain Provisions**

Operated by: Duke Energy Florida, LLC  
ORIS Code: 8049

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

<b>EU No.</b>	<b>Brief Description</b>
007	Simple Cycle Combustion Turbine Unit No. 7
008	Simple Cycle Combustion Turbine Unit No. 8
009	Simple Cycle Combustion Turbine Unit No. 9
010	Simple Cycle Combustion Turbine Unit No. 10
011	Simple Cycle Combustion Turbine Unit No. 11
018	Simple Cycle Combustion Turbine Unit No. 12
019	Simple Cycle Combustion Turbine Unit No. 13
020	Simple Cycle Combustion Turbine Unit No. 14

**A.1.** The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

DEP Form No. 62-210.900(1)(a), dated 05/18/2017, received 05/19/2017.

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

**A.2.** Sulfur Dioxide (SO<sub>2</sub>) Emission Allowances. SO<sub>2</sub> 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: None.

## SECTION IV. ACID RAIN PART.

### Federal Acid Rain Provisions

# 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 <b>Intercession City Plant</b>	State <b>FL</b>	ORIS/Plant Code <b>8049</b>
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#### STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO<sub>2</sub> Opt-in unit, enter "yes" in column "b".

For new units or SO<sub>2</sub> Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO <sub>2</sub> Opt-In Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO <sub>2</sub> Opt-in Units Commence Operation Date	New or SO <sub>2</sub> Opt-in Units Monitor Certification Deadline
EU007	No	Yes	N/A	N/A
EU008	No	Yes	N/A	N/A
EU009	No	Yes	N/A	N/A
EU010	No	Yes	N/A	N/A
EU011	No	Yes	N/A	N/A
EU018	No	Yes	N/A	N/A
EU019	No	Yes	N/A	N/A
EU020	No	Yes	N/A	N/A
		Yes		
		Yes		
		Yes		
		Yes		

DEP Form No. 62-210 500(1)(a) – Form  
Effective: 3/16/09

1

## SECTION IV. ACID RAIN PART.

### Federal Acid Rain Provisions

Intercession City Plant

#### 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<sub>2</sub> Opt-in unit, a monitoring plan for each SO<sub>2</sub> Opt-in unit must be submitted with the application pursuant to 40 CFR 74.14(a). For renewal applications for SO<sub>2</sub> 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

**SECTION IV. ACID RAIN PART.**  
**Federal Acid Rain Provisions**

Intercession City Plant

**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 73.

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<sub>x</sub> 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 72.7 or 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 effect 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 impeding any program for competitive bidding for power supply in a state in which such program is established.

**STEP 4**

For SO<sub>2</sub> Opt-in units only.

In column "f" enter the unit ID# for every SO<sub>2</sub> 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
N/A	N/A	N/A

# SECTION IV. ACID RAIN PART.

## Federal Acid Rain Provisions

Intercession City Plant

### STEP 5

For SO<sub>2</sub> Opt-in units only.  
(Not required for SO<sub>2</sub> Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO<sub>2</sub> 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.

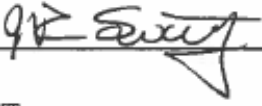
i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO <sub>2</sub> Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO <sub>2</sub> Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO <sub>2</sub> Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO <sub>2</sub> Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)
N/A	N/A	N/A	N/A	N/A	N/A

### STEP 6

For SO<sub>2</sub> Opt-in units only.

Attach additional requirements, certify and sign.

- 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.
- A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
- 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.
- Attach a complete compliance plan for SO<sub>2</sub> under 40 CFR 72.40.
- 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).
- 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	
<b>Certification (for designated representative or alternate designated representative only)</b>			
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 Jeffrey Swartz		Title VP - Fossil Hydro Operations	
Company Name Duke Energy Florida, LLC			
Phone (352) 501-6602		E-mail address Jeffrey.Swartz@duke-energy.com	
Signature 		Date 5/18/17	

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Effective: 3/16/06

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