Southern Power Company
Stanton A Combined Cycle Unit
Curtis H. Stanton Energy Center

Facility ID No. 0951378
Orange County

Title V Air Operation Permit Revision

Permit No. 0951378-003-AV

(1st Revision to Permit No. 0951378-001-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:

Central District Office
3319 Maguire Boulevard, Suite 232
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Title V Air Operation Permit Revision

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5150 South Alafaya Trail
Orlando, Florida 32831

Permit No. 0951378-003-AV
Stanton A Combined Cycle Unit
Facility ID No. 0951378
Title V Air Operation Permit Revision

The purpose of this permit is to issue a Title V air operation permit revision to Southern Power Company for the operation of the Stanton Combined Cycle Unit A. The existing Stanton A Combined Cycle Unit is located at the Curtis H. Stanton Energy Center in Orange County at 5150 South Alafaya Trail, Orlando, which is co-located with units owned and operated by Orlando Utilities Commission under facility ID No. 0950137. UTM Coordinates are: Zone 17, 483.6 kilometers (km) East, 3,151.12 km North. Latitude is: 28° 29' 18" North; and, Longitude is: 81° 10' 1.3" West.

The requested minor revisions include: clarifications that startup and shut down emissions are not included in the compliance averaging periods; clarifications to the compliance testing frequencies; and, the recognition that the requirement to determine the moisture content of the hot stack exhaust gasses is not needed, since the continuous emissions monitoring systems (CEMS) measure NO_X and CO concentrations on a wet basis, which can be converted to the required 15% O_2 on a dry basis through the use of the required algorithm.

This 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.

Initial Title V Air Operation Permit No. 0951378-001-AV Effective Date: January 1, 2018
Title V Air Operation Permit Revision No. 0951378-003-AV Effective Date: September 5, 2018
Renewal Application Due Date: May 20, 2022
Expiration Date: December 31, 2022

Jonathan Holtom

Digitally signed by
Jonathan Holtom, P.E.
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for:

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

SA/jh

Subsection A. Facility Description.

The Curtis H. Stanton Energy Center is an existing power plant (SIC No. 4911) located 144 km southeast from the Chassahowitzka National Wildlife Area; the nearest Federal Prevention of Significant Deterioration (PSD) Class I Area. The placard page above indicates the exact geographical coordinates. This site is comprised of multiple emissions units that are owned by multiple entities, and which are operated under two separate facility identification numbers to provide operational flexibility and better accuracy for compliance reporting purposes. Facility ID No. 0950137 is assigned to Orlando Utilities Commission (OUC) and Facility ID No. 0951378 is assigned to Southern Power Company. All the emissions units and activities addressed in the two Title V air operation permits issued to these separate operating entities are collectively considered a single facility for purposes of Title V and Prevention of Significant Deterioration (PSD) applicability. The combined facility is a major source of hazardous air pollutants (HAP).

OUC owns the land, and owns and operates most of the equipment, that comprises the Curtis H. Stanton Energy Center. Southern Power Company operates the Stanton A Combined Cycle Unit as a majority share-holder in a joint venture with Orlando Utilities Commission (OUC), Kissimmee Utilities Authority (KUA), and Florida Municipal Power Agency (FMPA).

The Southern Power Company controlled portion of the Curtis H. Stanton Energy Center Title V facility includes the Stanton A Combined Cycle Unit (Emissions Units 001 & 002), which consists of two nominal 190 megawatts (MW), General Electric "F" Class (PG7241FA) combustion turbine-electrical generators, fired with pipeline natural gas or diesel and equipped with evaporative coolers on the inlet air system, two supplementary fired heat recovery steam generators (HRSG), each with a 160-ft. stack, and one steam turbine-electrical generator rated at approximately 300 MW. Units 001 and 002 have a total nominal capacity of 680 MW with the steam turbine and will achieve approximately 700 MW during cold weather conditions.

The combustion turbines are equipped with dry low nitrogen oxides (NO_X) combustors as well as selective catalytic reduction (SCR) in order to control NO_X emissions to 3.5 parts per million by volume dry (ppmvd) at 15% oxygen (O_2) while firing natural gas. During fuel oil firing, emissions shall be held to 10 ppmvd at 15% O_2 using SCR plus water injection. Pipeline quality natural gas, 0.05% sulfur, by weight, fuel oil, and good combustion practices shall be employed to control all pollutants. These emissions units (the combustion turbines) are not subject to continuous assurance monitoring (CAM) because the NO_X continuous emissions monitoring system (CEMS) is used for continuance compliance determination. Thus, no CAM plan is included for these units in this permit.

Southern Power Company also operates a 563-kilowatt (kW) diesel engine-driven emergency generator subject to regulation pursuant to 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and an unregulated mechanical draft cooling tower.

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 B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Combined-Cycle Combustion Turbine AN
002	Combined-Cycle Combustion Turbine AS
003	563 kW Emergency Generator
Unregulated Emissions Units and Activities (see Appendix U, List of Unregulated Emissions Units and/or Activities)	
004	Mechanical Draft Cooling Tower

Subsection C. Applicable Regulations.

Based on the Title V air operation permit application received September 29, 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).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 003
40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines	001, 002
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	003
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (Satisfied by compliance with NSPS IIII)	003
Federal Acid Rain Program, Phase II	001, 002
40 CFR 75, Acid Rain Monitoring Provisions	
State Rule Citations	
Rule 62-4, F.A.C. (Permitting Requirements)	001, 002, 003
Rule 62-204, F.A.C (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	
Rule 62-212, F.A.C. (Preconstruction Review, PSD Review, and BACT)	
Rule 62-213, F.A.C. (Title V Air Operations Permits for Major Sources of Air Pollution)	
Rule 62-214, F.A.C. (Requirements for Sources Subject to the Federal Acid Rain Program)	001, 002
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)	001, 002, 003
PPS PA 81-14/SA2	001, 002
PSD-FL-313, 0950137-002-AC	

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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. Chemical (dust suppressants) or water application to unpaved roads, and unpaved yard areas.
b. Sweeping and general maintenance of paved roads and parking areas.
c. Landscaping or planting of vegetation.
d. Other techniques, as necessary.

[Rule 62-296.320(4)(c), F.A.C.; and, Application Received 9/29/17]

Annual Reports and Fees

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

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. 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 that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st 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.}

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit 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).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. (See paragraph e., below.)
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Division of Emergency Management, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the Division of Emergency Management on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 27P-21, F.A.C.
d. Any required written reports, notifications, certifications, and data required to be sent to the Division of Emergency Management, should be sent to: Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9970, Fax: (850) 488-1739.
e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://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.
f. Any required reports to be sent to the National Response Center, should be sent to: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, 1200 Pennsylvania Ave. NW, Mail Code: US EPA (5101T), Washington, DC 20460, Telephone: (800) 424-8802.

g. Send the required annual registration fee using approved forms made payable to: Cashier, Division of Emergency Management, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 27P-21, F.A.C.]

FW10. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 – June 30 and July 1 – December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include 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.; and, 40 CFR 60.19, 40 CFR 61.10 & 40 CFR 63.10]

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

EU No.	Brief Description
001	Combined-Cycle Combustion Turbine AN
002	Combined-Cycle Combustion Turbine AS

These emissions units include two nominal 190 MW, General Electric "F" Class (PG7241FA) combustion turbine-electrical generators, fired with pipeline natural gas or diesel fuel oil, equipped with Advanced Gas Path Hardware and Mark VIe Controls, and also equipped with evaporative coolers on the inlet air system, two supplementary fired heat recovery steam generators (HRSG), each with a 160 ft. stack, and one steam turbine-electrical generator rated at approximately 300 MW. Units 001 and 002 with the steam turbine have a total nominal capacity of 680 MW and will achieve approximately 700 megawatts during cold weather conditions.

The combustion turbines are equipped with dry low NO_X combustors and a selective catalytic reduction (SCR) system to control NO_X emissions to 3.5 ppmvd at 15% O_2 while firing natural gas. During fuel oil firing, emissions shall be held to 10 ppmvd at 15% O_2 using SCR plus water injection. Pipeline quality natural gas, 0.05% sulfur fuel oil, by weight, and good combustion practices shall be used to control all pollutants.

The combustion turbines are subject to the requirements of Phase II of the federal Acid Rain Program. These units hold ORIS code 55821. Unit 001 commercial start date was April 28, 2003, and Unit 002 commercial start date was April 28, 2003. Stack parameters are the same for both units: stack height is 160 feet, exit diameter is 19 feet, exit temperature is 187 degrees Fahrenheit (F) and volumetric flow rate is 636,000 actual cubic feet per minute (acfm).

These emissions units are not subject to compliance assurance monitoring (CAM) because the NO_X CEMS is used for continuance compliance determination. Thus, no CAM plan is included in this permit.

General

A.1. NSPS Requirements. Each combustion turbine (CT) shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.
a. Subpart A, General Provisions (see **Specific Condition A.2**)
b. Subpart GG, Standards of Performance for Stationary Gas Turbines. [See attached Appendix GG.]
[Permit No. 0950137-002-AC, Specific Condition 2.]

A.2. General Provisions. These emission units 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

[Permit No. 0950137-002-AC, Specific Condition 4.]

A.3. NSPS Subpart GG. Each emissions unit 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), F.A.C. The Subpart GG requirement to correct test data to International Organization for Standardization (ISO) conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s). Compliance determination for BACT standards shall comply with all applicable provisions of 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units Which Construction is Commenced After September 18, 1978, adopted by reference in Rule 62-204.800(8), F.A.C. [Permit No. 0950137-002-AC, Specific Condition 5.]

A.4. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices of pollution control equipment shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.; and, Permit No. 0950137-002-AC, Specific Condition 14.]

A.5. Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.; and, Permit No. 0950137-002-AC, Specific Condition 15.]

Control Technology

A.6. Equipment. Dry low NO_X (DLN) combustors and water injection capability are installed on each stationary combustion turbine. The permittee has installed a selective catalytic reduction system to comply with the NO_X and ammonia limits listed in **Specific Condition A.12**. Additionally, space is provided for the installation of oxidation catalysts. [Rules 62-4.070 and 62-212.400, F.A.C.; and, Permit No. 0950137-002-AC, Specific Condition 18.]

A.7. Testing Locations. The permittee shall maintain these units to accommodate adequate testing and sampling locations for compliance with the applicable emission limits (per each unit) listed in **Specific Conditions A.12. - A.16**. [Rules 62-204.800 & 62-213.440, F.A.C.; 40 CFR 60.40Da; and, Permit No. 0950137-002-AC, Specific Condition 19.]

Essential Potential to Emit (PTE) Parameters

A.8. Permitted Capacity.

a. *Combustion Turbine*. The maximum heat input rates to each CT/HRSG shall not exceed 2,402 million Btu (HHV) per hour (MMBtu/hr) when firing natural gas with duct burner firing and power augmentation or peak fire mode. The maximum heat input rates to each CT/HRSG shall not exceed 2,068 MMBtu/hr (HHV) when firing fuel oil. Manufacturer's curves corrected for ISO conditions were provided to the Department of Environmental Protection (DEP) within 45 days prior to the completion of the initial compliance testing.

b. *Heat Recovery Steam Generator equipped with Duct Burner*. The maximum heat input rate of the natural gas fired duct burner shall not exceed 533 MMBtu/hour (LHV) (590 MMBtu/hour (HHV)) at any temperature or under any scenario.

[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions); and, Permit Nos. 0950137-002-AC, Specific Condition 11. & 0950137-046-AC, Specific Condition 2.]

{Permitting note: Heat input capacity shall be determined by CEMS database used for the acid rain program. CEMS data availability shall meet 40 CFR Part 75 requirements at greater than 95% of the time. Only valid hourly data shall be used to determine compliance with this provision. The source shall maintain this database for up to 5 years and make the information available upon request by the Department.}

A.9. 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.10. Hours of Operation. Maximum allowable hours of operation for each CT/HRSG Emissions Unit are 8,760 hours per year while firing natural gas. Fuel oil firing is permitted for 1,000 hours during any consecutive 12-month period in each CT. [Rule 62-210.200, F.A.C. (Definitions - Potential Emissions); and, Permit No. 0950137-002-AC, Specific Condition 16.]

A.11. Methods of Operation.

a. *Fuels*. Only pipeline natural gas or (up to) 1,000 hours per year of distillate fuel oil containing less than 0.05% sulfur, by weight, shall be fired in each CT emissions unit. Only natural gas shall be fired in each duct burner.

b. *Simple Cycle Operation*. The plant may not be operated without the use of the SCR system except during periods of startup and shutdown.

[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions); and, Permit No. 0950137-002-AC, Specific Conditions 9. & 17.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for **Specific Conditions A.12.** through **A.16.** are based on the specified averaging time of the applicable test method.

A.12. Nitrogen Oxides (NO_x) and Ammonia Emissions. (See also Specific Condition **A.17.** for alternative emissions limits during periods of startup and shutdown.)

a. The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on natural gas, shall not exceed 3.5 ppmvd @15% O_2 on a 3-hour block average. This limit shall apply whether or not the unit is operating with duct burner on and/or in power augmentation mode or peak fire mode. Compliance shall be determined by the continuous emission monitor (CEMS).

b. The emissions of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil shall not exceed 10.0 ppmvd @15% O2 on a 3-hour block average. Compliance shall be determined by the continuous emission monitor (CEMS).

c. Emissions of NO_X from the duct burner shall not exceed 0.1 lb/MMBtu, which is more stringent than the NSPS.

d. The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 5.0 ppmvd @15% O2.

[BACT Determination; and, Permit Nos. 0950137-002-AC, Specific Condition 21. & 0950137-046-AC, Specific Condition 3.]

*{Permitting Note: Pursuant to the provisions of Specific Conditions 26. and 41. of Permit No. 0950137-002-AC/PSD-FL-313 (and as revised May 16, 2003), NO_X and CO CEMS readings during periods of malfunction may be excluded from the compliance averages. However, emissions during periods of startup and shutdown must be included in the compliance averages to demonstrate compliance with the alternative emissions limits for startup and shut down. See also Specific Conditions **A.17.** and **A.21.**c.}*

A.13. Carbon Monoxide (CO) Emissions. (See also Specific Condition **A.17.** for alternative emissions limits during periods of startup and shutdown.) Emissions of CO in the stack exhaust gas with the combustion turbine operating on natural gas shall not exceed 17 ppmvd @15% O_2 on a 24-hour block average to be demonstrated by CEMS; or 14 ppmvd @15% O_2 with the CT operating on fuel oil on a 24-hr block average to be demonstrated by CEMS. These limits shall also be demonstrated by annual stack test using EPA Method 10 or through annual relative accuracy test audit (RATA) testing. [Permit Nos. 0950137-002-AC, Specific Condition 22. & 0950137-043-AC, Specific Condition 2.]

A.14. Volatile Organic Compounds (VOC) Emissions. Emissions of VOC in the stack exhaust gas (baseload at ISO conditions) shall not exceed 2.7 ppmvd @15% O_2 with the CT firing fuel oil or 6.3 ppmvd @15% O_2 with the CT firing natural gas (with maximum duct burner firing and operating in power augmentation mode or peak fire mode). [BACT Determination; Rule 62-212.400, F.A.C.; and, Permit No. 0950137-046-AC, Specific Condition 4.]

A.15. Sulfur Dioxide (SO_2) Emissions. SO_2 emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 1.5 grains per 100 standard cubic feet) and up to 1,000 hours per consecutive 12-month period of 0.05% sulfur, by weight, fuel oil. Compliance with these fuel limits in conjunction with implementation of the attached Appendix GG will demonstrate compliance with the applicable NSPS SO_2 emissions limitations from the duct burner and the combustion turbine. Note: This will effectively limit the combined SO_2 emissions for EU 001 and EU 002 to approximately 134 tons per year. [BACT Determination; 40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400, and 62-204.800(8), F.A.C.; and, Permit No. 0950137-002-AC, Specific Condition 24.]

A.16. PM/PM_{10} and Visible Emissions (VE). Visible emissions shall not exceed 10 percent opacity from the stack in use. [BACT Determination; Rules 62-4.070, 62-212.400 and 62-204.800(8), F.A.C.; and, Permit No. 0950137-002-AC, Specific Condition 25.]

Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

A.17. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown, fuel switching, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period. During any 24-hour period in which an hour of start-up or shutdown occurs, the following alternative emission limits shall apply on the basis of a 24-hour rolling average:

a. An alternative NO_x limit of 127 lb/hr shall apply if natural gas is the exclusively fired fuel;
b. An alternative NO_x limit of 370 lb/hr shall apply if any fuel oil is fired; and,
c. An alternative CO limit of 155 lb/hr firing either natural gas or fuel oil.

The 24-hour [rolling] averages shall be based on all available data excluding calibration data. Operation below 50% output per turbine shall otherwise be limited to 2 hours in any 24-hour period. [BACT Determination; and, Permit No. 0950137-002-AC, Specific Condition 26., modified on May 16, 2003.]

A.18. Excess Emissions Prohibited. Excess emissions 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 pursuant to Rule 62-210.700, F.A.C. These emissions shall be included in the 3-hr average for NO_X and the 24-hr average for CO. [Permit No. 0950137-002-AC, Specific Condition 27.]

Monitoring of Operations

A.19. Subpart Da Monitoring and Recordkeeping Requirements. The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart Da. [40 CFR 60, Subpart Da; and, Permit No. 0950137-002-AC, Specific Condition 44.]

A.20. Selective Catalytic Reduction System (SCR) Compliance Procedures.

a. At permit renewal, a test for nitrogen oxides and ammonia from the CT/HRSG pair shall be simultaneously conducted while operating in the power augmentation mode with the duct burner and operating on the primary fuel. The RATA for NO_X may be used in lieu of stack testing. The ammonia injection rate necessary to comply with the NO_X standard shall be established and reported during the each performance test.
b. The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods, as dictated by manufacturer's guidelines and in accordance with this permit.
c. The permittee shall install and operate an ammonia flow meter to measure and record the ammonia injection rate to the SCR system of the CT/HRSG set. It shall be maintained and calibrated according to the manufacturer’s specifications.
d. During the stack test, the permittee (at each tested load condition) shall determine and report the ammonia flow rate required to meet the emissions limitations. During NO_X CEM downtimes or malfunctions, the permittee shall operate at the ammonia flow rate, which was established during the last stack test.
e. In the event of a complaint or concern by an inspector, the permittee shall be capable of making an instantaneous measurement using inlet and outlet NO_X concentrations from the SCR system and ammonia flow supplied to the SCR system to determine ammonia slip. This determination shall not be used as a compliance method but only as an indicator to determine if a special compliance test is needed to demonstrate NO_X and ammonia slip requirements of the permit. The calculation procedure shall be provided with the CEM monitoring plan required by 40 CFR Part 75. The following calculation represents one means by which the permittee may demonstrate compliance with this condition:

Ammonia slip @ 15%O_2 = (A-(B x C/1,000,000)) x (1,000,000/B) x D,

where: A= ammonia injection rate (lb/hr)/ 17 (lb/lb-mol)
B = dry gas exhaust flow rate (lb/hr) / 29 (lb/lb-mol)
C = change in measured NO_X (ppmv@15%O_2) across catalyst
D = correction factor, derived annually during compliance testing by comparing actual to tested ammonia slip
[Note: exhaust gas flow rate may be back calculated using heat input and F factor.]

f. The calculation along with each newly determined correction factor shall be submitted with each compliance test. Calibration data ("as found" and "as left") shall be provided for each measurement device utilized to make the ammonia emission measurement and submitted with each compliance test.
g. Upon specific request by the Department, a special re-test shall occur as described in the previous conditions concerning test requirements, in order to demonstrate that all NO_X and ammonia slip related permit limits can be complied with.

[Permit Nos. 0950137-002-AC, Specific Condition 45. & 0950137-043-AC, Specific Condition 4.]

Continuous Monitoring Requirements

A.21. Continuous Monitoring Systems. The permittee shall calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the emissions of NO_X and CO from these emissions units, and the Carbon Dioxide (CO_2) content of the flue gas at the location where NO_X and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEM system shall be used to demonstrate compliance with the emission limits for NO_X and CO established in this permit. Compliance with the emission limits for NO_X shall be based on a 3-hour block average. The 3-hour block average shall be calculated from 3 consecutive hourly average emission rate values. Compliance with the emission limits for CO shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 consecutive hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. The permittee may use the inlet SCR NO_X monitor as a backup analyzer in determining excess emissions during startup. If the CEM system 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) (See Permitting Note, below). 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 CEM system shall be expressed as ppmvd, corrected to 15% oxygen.

a. *NO_X Monitor*. The NO_X monitor shall be certified and operated in accordance with the following requirements. The NO_X monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the emission limits specified within this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 3-hour block. However, in the event that the permittee maintains 95% or greater availability of the continuous emission monitoring systems used for determining NO_X emissions compliance for the previous quarter, then compliance with the emission limits for NO_X shall be based on 3 valid consecutive hours of data for a 3-hour block average. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E, of Appendix A of 40 CFR 60. The NO_X monitor shall be a dual range monitor. The span for the lower range shall be between or inclusive of the values of 10 and 20 ppm, and the span

for the upper range shall be between or inclusive of the values of 200 and 250 ppm, as corrected to 15% O_2.

b. *CO Monitor*. The CO monitor and CO_2 monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. The CO_2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to the Department's Central District Office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, of Appendix A of 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall be between or inclusive of the values of 20 and 30 ppm, and the span for the upper range shall be between or inclusive of the values of 500 and 1000 ppm, as corrected to 15% O_2. The RATA tests required for the CO_2 monitor shall be performed using EPA Method 3A, of Appendix A of 40 CFR 60.

c. NO_X, CO and CO_2 emissions data shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. NO_X and CO emissions data recorded during malfunctions may be excluded from the block average calculated to demonstrate compliance with the emission limits specified within this permit.

d. Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

e. A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to the Department's Central District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur. Upon request from the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.

[Note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures]. [Permit No. 0950137-002-AC, Specific Condition 41., and as modified on May 16, 2003.]

{Permitting Note: The use of the installed wet CO_2 CEMS and conversion algorithm is an option that satisfies the requirement to determine the moisture content of the stack gas for correction of emissions to 15% O_2, dry).}

A.22. Continuous Monitoring System Requirements. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 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. [Permit No. 0950137-002-AC, Specific Condition 42.]

Test Methods and Procedures

A.23. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25, 25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
CTM-027, 320	Conditional EPA Test Method 027, Measurement of Ammonia Slip (or equivalent method)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; and, Permit No. 0950137-002-AC]

A.24. 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.25. Annual Compliance Tests Required. During each calendar year January 1st to December 31st), each EU shall be tested to demonstrate compliance with the emissions standards for visible emissions, carbon monoxide, and nitrogen oxides. No annual stack test is required for NOx and CO so long as NOx and CO CEMS are utilized that meet the applicable quality assurance and quality control requirements of 40 CFR Part 60 and Part 75. A VE tests is not required when firing fuel oil so long as total fuel oil firing during the fiscal year is less than 400 hours. An annual VE test is required when firing the primary fuel. [Rule 62-297.310(8)(b), F.A.C.; and, Permit Nos. 0950137-002-AC, Specific Condition 30., and 0950137-046-AC, Specific Conditions 5. & 6.]

A.26. Compliance Tests Prior To Renewal. Compliance tests shall be performed for visible emissions, carbon monoxide, nitrogen oxides, and ammonia slip once every 5 years. No annual stack test is required for NOx and CO so long as NOx and CO CEMS are utilized that meet the applicable quality assurance and quality control requirements of 40 CFR Part 60 and Part 75. Tests shall not be required for any unit with emissions generated solely from the combustion of fuel oil provided that during the previous permit cycle, the unit did not burn any fuel oil for more than 400 hours, other than during startup, during each calendar year included in the five-year period of permitted operation. Ammonia Slip testing while firing the primary fuel is required prior to the renewal of each operation permit (see also Specific Condition **A.20.**). The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **A.12. - A.16**. [Rules 62-210.300(2)(a) & 62-297.310(8)(a), F.A.C.; and, Permit Nos. 0950137-043-AC, Specific Condition 3. & 5., and 0950137-046-AC, Specific Condition 7.]

{Permitting Note: Compliance tests that are only required to be conducted once "prior to renewal" of a permit may be conducted at any time during the effective 5-year term of each Title V air operation permit.}

A.27. Performance Tests. Performance tests shall be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or addition of oxidation catalyst (or change of combustors, if specifically requested by the DEP on a case-by-case basis). Annual compliance tests shall be performed during every calendar year January 1st to December 31st) pursuant to Rule 62-297.310(8), F.A.C. The reference methods listed in **Specific Condition A.23.** shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O_2) at the measured lb/hr NO_X emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the Department's request**.** [Permit No. 0950137-046-AC, Specific Condition 5; and Applicant request in an e-mail memorandum received on October 7, 2004.]

A.28. Continuous Compliance with the CO and NO_X Emission Limits. Continuous compliance with the CO and NO_X emission limits shall be demonstrated by the CEMS equipment on the specified hourly average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each period and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous period. [Permit No. 0950137-002-AC, Specific Condition 31.]

A.29. Compliance with the SO_2 and PM/PM_{10} Emission Limits. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard, the applicant is responsible for ensuring that the procedures outlined in attached Appendix GG are complied with. [Permit No. 0950137-002-AC, Specific Condition 32.]

A.30. Compliance with CO Emission Limit. An annual test for CO shall be conducted at 100% capacity with the duct burners off. The NO_X and CO test results shall be the average of three valid one-hour runs. Annual RATA testing for the CO and NO_X CEMS shall be required pursuant to 40 CFR 75 and may substitute for the annual CO stack testing requirement. [Permit No. 0950137-002-AC, Specific Condition 33.]

A.31. Compliance with the VOC Emission Limit. An *initial* test was required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit shall be employed as a surrogate and no annual testing or permit renewal testing is required. [Permit No. 0950137-046-AC, Specific Condition 8.]

A.32. Testing Procedures. Unless otherwise specified, 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 inlet air temperature during the test (with 100 percent represented by a curve depicting heat input vs. inlet temperature). Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [Permit No. 0950137-002-AC, Specific Condition 35.]

Recordkeeping and Reporting Requirements

A.33. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emissions	Quarterly	**A.36.**

A.34. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

A.35. Records. All measurements, records, and other data required to be maintained by the applicant shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to Department representatives upon request. The applicant will be required to maintain records indicating the daily hours of operation of each CT/HRSG unit. These records shall specify which type of fuel is being combusted and the

records shall be available for review at the site. Each calendar month, a compilation of the hours of operation for each CT/HRSG unit combusting fuel oil shall be made and totalized for the most recent consecutive 12-month period. Each annual operating report (AOR) submitted by the applicant shall include a compilation of each consecutive 12-month period during the preceding calendar year. [Permit No. 0950137-002-AC, Specific Condition 39.]

A.36. Excess Emissions Report. If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify the Department's Central District Office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, and using the monitoring methods listed in this permit, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in **Specific Conditions A.13.** through **A.16**. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; 40 CFR 60.7; and, Permit No. 0950137-002-AC, Specific Condition 28.]

A.37. Quarterly Reports. Quarterly excess emission reports, in accordance with 40 CFR 60.7, shall be submitted to the Department's Central District Office. [Permit No. 0950137-002-AC, Specific Condition 14., Section II.]

A.38. Actual Emissions Reporting. Because the review and issuance of permit No. 0950137-046-AC was based on an analysis that compared baseline actual emissions to projected actual emissions which was relied upon to avoid the requirements of subsections 62-212.400(4) through (12), F.A.C., for emissions of nitrogen oxides (NO_X), the permittee is subject to the following monitoring, reporting and recordkeeping provisions:

a. The permittee shall monitor the emissions of NO_X emitted by EUs 001 and 002; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change (Calendar years 2016 through 2020). Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix RR of this permit.

b. The permittee shall submit a report to the Department within 60 days after the end of each calendar year specified in paragraph **a.**, documenting the unit's annual emissions of NO_X during the previous calendar year. The report shall contain the following:
   (1) The name, address and telephone number of the owner or operator of the major stationary source;
   (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix RR of this permit;
   (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
   (4) Any other information that the owner or operator wishes to include in the report.

[Rules 62-212.300(1)(e) & 62-210.370, F.A.C.; and, Permit No. 0950137-046-AC]

{Permitting note: Actual Emissions - 92.93 TPY (Baseline Actual Emissions) = < 40 TPY of NO_X emissions. According to the applicant, the changes authorized by project 0950137-046-AC became effective on December 4, 2015. Therefore, the 5-year reporting period for these EUs shall be for operations during calendar years 2016 through 2020, reported in calendar years 2017 through 2021.}

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Subsection B. 563 kW Emergency Generator

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

EU No.	Brief Description
003	One 563 kW Diesel Engine-Driven Emergency Generator

This unit is a compression ignition reciprocating internal combustion engine-driven emergency generator at Stanton A. This engine fires ultra-low sulfur diesel fuel.

The following table provides important details for this engine.

Engine Brake HP	Date of Manufacture	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
760	2009	2008	14.9 liters total 2.28 l/c	Cummins, Inc.	QXS15-G9 Nonroad 2

{Permitting Notes: This compression ignition reciprocating internal combustion engine (CI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This is a "new" stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at a major source of HAP, that commenced construction on or after 6/12/2006, and that has a post-2007 model year. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.}

Essential Potential to Emit (PTE) Parameters

B.1. Authorized Fuel. This Stationary Reciprocating Internal Combustion Engine (RICE) must use diesel fuel that meets the following requirements for non-road diesel fuel:

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

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

[40 CFR 60.4207(b) and 40 CFR 80.510(b)]

B.2. Restricted Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations.

b. *Maintenance and Testing.* This engine 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.

c. *Non-emergency Situations*. This engine may 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. These 50 hours cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)]

B.3. Operation and Maintenance. Except as permitted in Specific Condition **B.8.**, the owner or operator must operate and maintain the stationary CI internal combustion engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. This RICE must be maintained and operated to meet the emissions limits in Specific Conditions **B.4. - B.6.** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) & (3)]

Emissions Standards

B.4. NO_X + NMHC Emissions. Emissions of NO_X plus non-methane hydrocarbons shall not exceed 6.4 grams per kilowatt hour (g/kW-hr). [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]

B.5. CO Emissions. Carbon monoxide (CO) emissions shall not exceed 3.5 g/kW-hr. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]

B.6. PM Emissions. Particulate matter (PM) emissions shall not exceed 0.20 g/kW-hr. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) & 40 CFR 89.112]

Testing and Compliance Requirements

B.7. Engine Certification Requirements. The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition **B.8.** [40 CFR 60.4211(c)]

B.8. Compliance Requirements Due to Loss of Certification. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g)(3)]

B.9. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **B.8.**, the following requirements shall be met:

a. *Testing Procedures*. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1042, Subpart F. Link to Subpart F

b. *NTE Standards*. Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in Specific Conditions **B.4.**, **B.5.** and **B.6.**, determined from the following equation:

NTE Requirement For Each Pollutant = (1.25) x (STD) (Eq. 1)

[40 CFR 60.4212(a) & (c)]

B.10. Common Testing Requirements. Unless otherwise specified and if required, 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.]

Monitoring Requirements

B.11. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

Records and Reports

B.12. Hours of Operation Records. The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214]

B.13. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Condition **B.8.**, the owner or operator must keep the following records:

a. Engine manufacturer documentation and certification indicating compliance with the standards.
b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
c. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

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

B.14. Testing Notification. At such time that the requirements of Specific Condition **B.8.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1)]

B.15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

General Provisions

B.16. 40 CFR 60 Subpart A, General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below. Link to 40 CFR 60, Subpart A - General Provisions.

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)
§ 60.3	Units and abbreviations
§ 60.4	Address
§ 60.5	Determination of construction or modification
§ 60.6	Review of plans
§ 60.9	Availability of information
§ 60.10	State Authority
§ 60.12	Circumvention
§ 60.14	Modification
§ 60.15	Reconstruction
§ 60.16	Priority list
§ 60.17	Incorporations by reference
§ 60.19	General notification and reporting requirements

[40 CFR 60.4218]

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Operated by: Southern Power Company
Plant: Stanton Energy Center Unit A
ORIS Code: 55821

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

EU No.	EPA ID	Brief Description
001	25	Combined-Cycle Combustion Turbine – Stanton Unit AN
002	26	Combined-Cycle Combustion Turbine – Stanton Unit AS

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 applications listed below:
a. DEP Form No. 62-210.900(1)(a), dated 08/25/17, received 09/29/17.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur Dioxide (SO_2) Emission Allowances. SO_2 emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

A.3. Comments, Notes, and Justifications: None.

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Acid Rain Part Application

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

This submission is: ☐ New ☐ Revised ■ Renewal

STEP 1

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

Plant name	State	ORIS/Plant Code
Stanton A Combined Cycle	FL	055821

STEP 2
Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO_2 Opt-in unit, enter "yes" in column "b".

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

a	b	c	d	e
Unit ID#	SO_2 Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO_2 Opt-in Units Commence Operation Date	New or SO_2 Opt-in Units Monitor Certification Deadline
25		Yes		
26		Yes		

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Stanton A Combined Cycle
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

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

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

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Plant Name (from STEP 1)

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4
For SO_2 Opt-in units only.

In column "f" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

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

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Plant Name (from STEP 1)

STEP 5

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

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

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

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

STEP 6

For SO_2 Opt-in units only.

Attach additional requirements, certify and sign.

A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
D. Attach a complete compliance plan for SO_2 under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature	Date

STEP 7

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

Certification (for designated representative or alternate designated representative only)

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

Circe Starks Name	Compliance Director Title
Southern Power – Florida, LLC Owner Company Name	
(250) 257-2647 Phone	cstarks@southernco.com E-mail address
Signature Circe A. Starks	Date 08/25/17

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