FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTINEZ CENTER
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

PERMITTEE

Orlando Utilities Commission
P.O. Box 3193
Orlando, Florida 32802

Authorized Representative:
Mr. Chip Merriam, Vice President

Air Permit No. 0950137-043-AC
Facility ID No. 0950137
SIC No. 4911

Fuel Usage and Ammonia Testing
Permit Expires: December 31, 2014

PROJECT

This is the final air construction permit revision, which authorizes changes to conditions of prior air construction permits related to fuel usage and ammonia testing at the Stanton Energy Center facility. The facility is located in Orange County at 5100 South Alafaya Trail, Orlando, Florida.

This final permit revision is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. As noted in the Final Determination provided with this final permit, no changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit revision is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

(DRAFT)

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

JFK/dlr/tbc

Draft

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Chip Merriam, OUC: (cmerriam@ouc.com)
Mr. Scott Osbourn, P.E., Golder Associates: (sosbourn@golder.com)
Mr. Tom Lubozynski, DEP Central District: (tom.lubozynski@dep.state.fl.us)
Mr. Justin Green, DEP Siting Office: (justine.green@dep.state.fl.us)
Ms. Heather Ceron, EPA Region 4: (ceron.heather@epa.gov)
Ms. Katy Lusky, EPA Region 4: (lusky.kathleen@epa.gov)
Ms. Natasha Hazziez, EPA Region 4: (hazziez.natasha@epa.gov)
Ms. Ana Oquendo, EPA Region 4: (oquendo.ana@epa.gov)
Ms. Lynn Scearce, DEP OPC: (lynn.scearce@dep.state.fl.us)
Ms. Alisa Coe, Earth Justice: (acoe@earthjustice.org)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(DRAFT)

Draft

FACILITY AND PROJECT DESCRIPTION

This facility consists of two fossil fuel fired steam electric generating stations, emissions unit (E.U.) identification (ID) No. 001 (Unit No. 1) and 002 (Unit No. 2); also, there are storage and handling facilities for solid fuels, fly ash, limestone, gypsum, slag, and bottom ash. Unit No. 1 consists of a Babcock and Wilcox boiler/steam generator (Model RB 611) and steam turbine, which drives a generator with a nameplate rating of 468 megawatts (MW). Unit No. 2 consists of a Babcock and Wilcox boiler/steam generator (Model RB 621) and steam turbine, which drives a generator with a nameplate rating of 468 MW. Each boiler/steam generator is a wall fired dry bottom unit. Unit Nos. 1 and 2 are fired with coal.

Emission Units 025 and 026 (Stanton Unit A) are nominal 170 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 25 and 26 have a total nominal capacity of 640 MW and will achieve approximately 700 MW during extreme winter peaking conditions.

Emission Unit 037 (Stanton Unit B) consists of: one nominal 150 megawatts (MW) General Electric 7241 FA combustion turbine-electrical generator (CTG); a supplementary fired heat recovery steam generator (HRSG) with natural gas fueled duct burners; a nominal 150 MW steam turbine generator (STG); and auxiliary equipment. The unit includes highly automated controls, described as the GE Mark VI Gas Turbine Control System to fulfill all of the gas turbine control requirements.

The emission units effected by this permitting action are listed below.

EU No.	Brief Description
025	Stanton Unit A- Combined-Cycle Combustion Turbine
026	Stanton Unit A- Combined-Cycle Combustion Turbine
037	Stanton Unit B - 300 MW Combined Cycle Combustion Turbine

The applicant requested an air construction permit revision to change several conditions related to fuel oil testing requirements for Stanton Unit A and ammonia testing for Stanton Units A and B.

REGULATORY CLASSIFICATION

Title III: The facility is a potential major source of hazardous air pollutants (HAP).

NESHAP: The facility operates units subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 Code of Federal Regulations (CFR) 63.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 CFR 60.

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

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major stationary source in accordance with Rule 62-212.400, F.A.C.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete, the draft air construction permit, and the Technical Evaluation and Preliminary Determination.

Draft

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department. The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Central District Office. The mailing address and phone number are: 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767, Telephone: 407/894-7555, Fax: 407/897-2966.

3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); and Appendix C (Common Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

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

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

Draft

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

EU No.	Brief Description
025	Stanton Unit A- Combined-Cycle Combustion Turbine
026	Stanton Unit A- Combined-Cycle Combustion Turbine
037	Stanton Unit B - 300 MW Combined Cycle Combustion Turbine

Specific Condition 1.

Other Permits: Except as specified below, these units remain subject to the applicable requirements established in all previous air construction permits issued for this facility. [Rule 62-4.070, F.A.C.]

Specific Condition 2

- **Specific Condition III-22 of Permit No. 0950137-002-AC** is changed as follows:

Carbon Monoxide (CO) Emissions. Emissions of CO in the stack exhaust gas ~~(at ISO conditions)~~ 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. [BACT Determination; Rule 62-212.400, F.A.C.; and 0950137-002-AC, Specific Condition 22.]

Specific Condition 3.

- **Specific Condition III-30 of Permit No. 0950137-002-AC** is changed as follows:

Initial (I) performance tests shall be performed by the deadlines in Specific Condition 29. Initial Stack 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 restarting the CT), such as the replacement of the SCR catalyst or addition of an oxidation catalyst (or change of combustors, if specifically requested by the DEP on a case-by-case basis). ~~Annual (A) compliance test shall be performed during every fiscal year (October 1 – September 30) pursuant to Rule 62-297.310(7), F.A.C, on these units as indicated.~~ The Following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. Where initial tests are indicated, these tests shall be repeated prior to the renewal of each operation permit. The Relative Accuracy Test Audits (RATA) for NO_X and CO CEMS may be used in lieu of annual stack testing for these pollutants. 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. Ammonia Slip testing while firing the primary fuel is required prior to the renewal of each operation permit.

- Method CTM-027 for ammonia slip ~~(I/A)~~ ~~to be completed simultaneously with NO_x compliance testing.~~

The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O2) at the measured lb/hr NO_x emission rate as a means of compliance with the BACT standard.

Specific Condition 4

- **Specific Condition III-45 of Permit No. 0950137-002-AC** is changed as follows:

Selective Catalytic reduction System (SCR) Compliance Procedures:

At permit renewal an ~~An annual~~ a stack emission 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 as defined in Specific Condition 21 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 each performance test.

Specific Condition 5

- **Specific Condition III.A-23 of Permit No. 0950137-020-AC** is changed as follows:

Annual Compliance Tests: During each federal fiscal year (October 1st, to September 30th), the CTG shall be tested to demonstrate compliance with the emission standard for visible emissions. NO_X and CO emissions data collected during the required continuous monitor Relative Accuracy Test Audits (RATAs) may be used to demonstrate compliance with the CO and NO_X standards. Prior to permit renewal stack ~~Annual~~ testing to determine the ammonia slip shall be conducted while firing the primary fuel. NO_X emissions recorded by the CEMS shall be reported for each ammonia slip test run. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period. [Rules 62-212.400 (BACT) and 62-297.310(7)(a)(4), F.A.C.]

Draft