DRAFT

PERMITTEE

Florida Municipal Power Agency
4545 Energy Lane
Fort Pierce, Florida 34981

Treasure Coast Energy Center	
DEP File No.	1110121-006-AC
Draft Permit No.	PSD-FL-353C
SIC No.	4911

Authorized Representative:
Edward S. Leongomez, Plant Manager

PROJECT

This is the final permit revision that modifies certain specific conditions of air construction permit 1110121-004-AC (PSD-FL-353B) that authorized the construction of a nominal 300 megawatt (MW) gas-fired combined cycle electrical power plant at the Treasure Coast Energy Center. The project included one 170 MW combustion turbine generator, one heat recovery steam generator, a 130 MW steam turbine generator, a fuel oil storage tank, a mechanical draft cooling tower, and auxiliary equipment. The project is located southwest of the City of Fort Pierce, East of Highway 95, in St. Lucie County. This final permit is organized into the following sections: Section 1 (General Information), Section 2 (Administrative Requirements) and Section 3 (Emissions Unit Permit Revisions). As noted in the Final Determination provided with this final permit revision, no changes were made to the draft permit revision.

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.). 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. A copy of this permit revision shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit revision, 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)

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

JFK/jkh/tbc

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit Package (including the Final Permit and Final Determination), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested to the persons listed below:

Mr. Edward S. Leongomez, Florida Municipal Power Authority: esl@fpua.com
Mr. Stanley A. Armbruster, P.E., Black & Veatch: armbrustersa@bv.com
Mr. Lennon Anderson, DEP - Southeast District Office: lennon.anderson@dep.state.fl.us
Ms. Katy Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
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Ms. Lynn Scearce, DEP - OPC: lynn.scearce@dep.state.fl.us

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.

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility is a nominal 300 megawatt (MW) gas-fired combined cycle electrical power plant. The plant includes one 170 MW combustion turbine generator, one heat recovery steam generator (HRSG), a 130 MW steam turbine generator, a 930,000 gallon fuel oil storage tank, a mechanical draft cooling tower, and auxiliary equipment. The facility is located southwest of the City of Fort Pierce, East of Highway 95, in St. Lucie County.

001	Unit 1 consists of a General Electric PG7241 FA gas turbine electrical generator (nominal 170 MW) equipped with evaporative inlet air cooling, a heat recovery steam generator (HRSG) with supplemental duct firing, a HRSG stack, and a steam turbine electrical generator (nominal 130 MW).
002	One distillate fuel oil storage tank for Unit 1 combustion turbine (930,000 gallons).
003	One 8-cell mechanical draft cooling tower.
004	One safe shutdown generator (approximately 1,102 horsepower (hp)) with associated 1000 gallon fuel oil storage tank.
005	One diesel engine fire pump (approximately 290 hp) with associated 500 gallon fuel oil storage tank.

Proposed Project

This permit modification revises certain specific conditions of air construction permits No. 1110121-001-AC (PSD-FL-353) and No. 1110121-004-AC (PSD-FL-353B), which authorized the construction of a nominal 300 megawatt (MW) gas-fired combined cycle electrical power plant at the Treasure Coast Energy Center. Details are provided in the project's Technical Evaluation and Preliminary Determination document.

REGULATORY CLASSIFICATION

Title III: The facility is not a major source of hazardous air pollutants (HAP).

Title IV: The facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

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

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

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

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 and the Technical Evaluation and Preliminary Determination.

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 Southeast District Office. The mailing address and phone number of the Southeast District Office are: 400 North Congress Avenue, West Palm Beach, Florida 33401, Telephone: 561/681-6600, Fax: 561/681-6755.
3. 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.
4. 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.]
5. 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.]

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

EU No.	Brief Description
001	Unit 1 consists of a General Electric PG7241 FA gas turbine electrical generator (nominal 170 MW) equipped with evaporative inlet air cooling, a heat recovery steam generator (HRSG) with supplemental duct firing, a HRSG stack, and a steam turbine electrical generator (nominal 130 MW).

1. Other Permits. Except as listed below, all other conditions of existing permits remain in effect and unchanged.

This permit revision modifies certain specific conditions of air construction permit Nos. 1110121-001-AC (PSD-FL-353) and 1110121-004-AC (PSD-FL-353B). Note: Double underline indicates additions and ~~strikethrough~~ indicates deletions.

2. Specific Condition 18. of air construction permit No. 1110121-004-AC (PSD-FL-353B) is changed as follows:

18. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown, and documented malfunctions shall be permitted, provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. For the gas turbine (CTG)/HRSG system, excess emissions resulting from startup, shutdown, or documented malfunctions shall not exceed two hours in a 24-hour block (as defined in Condition 26c): A "documented malfunction" means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail.

    a. *Steam Turbine (STG)/HRSG System Cold Startup:* For cold startup of the STG/HRSG system, excess emissions from the CTG/HRSG system shall not exceed six hours in a 24-hour block. A "cold startup of the STG/HRSG system" is defined as startup of the combined cycle system following a shutdown of the steam turbine lasting at least 48 hours.

    {Permitting Note: During a cold startup of the steam turbine system, the CTG/HRSG system is brought on line at low load to gradually increase the temperature of the STG and prevent thermal metal fatigue.}

    b. *STG/HRSG System Warm Startup:* For warm startup of the STG/HRSG system, excess emissions shall not exceed four hours in a 24-hour block. A "warm startup of the STG/HRSG system" is defined as a startup of the combined cycle system following a shutdown of the steam turbine lasting at least 8 hours and less than 48 hours.

    c. *STG/HRSG System Hot Startup:* For hot startup of the STG/HRSG system, excess emissions shall not exceed two hours in a 24-hour block. A "hot startup of the STG/HRSG system" is defined as a startup of the combined cycle system following a shutdown of the steam turbine lasting less than 8 hours.

    d. *Shutdown:* For shutdown of the combined cycle operation, excess emissions from the CTG/HRSG system shall not exceed three hours in a 24-hour block.

    e. *Fuel Switching:* Excess emissions due to oil-to-gas and gas-to-oil fuel switching shall not exceed ~~1~~ two (2) hours each, respectively, in a 24-hour block.

    f. *Documented Malfunction:* For the CTG/HRSG system, excess emissions resulting from documented malfunctions shall not exceed two hours in a 24-hour block.

3. Specific Condition 20. of air construction permit No. 1110121-004-AC (PSD-FL-353B) is changed as follows:

20. DLN Tuning: CEMS data collected during initial or other major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or circumstances as identified or requested by the equipment vendor. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least ~~14~~ one working (business) day~~s~~ that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail. [Design; Rule 62-4.070(3), F.A.C.]

4. Specific Condition 32.b. of air construction permit No. 1110121-001-AC (PSD-FL-353) is changed as follows:

32. b. *SIP ~~Quarterly~~ Semiannual Report*: Within 30 days following the end of each calendar ~~quarter~~ half, the permittee shall submit a report to the Compliance Authority summarizing periods of CO and NO_X emissions in excess of the BACT permit standards following the NSPS format in 40 CFR 60.7(c), Subpart A. Periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. In addition, the report shall summarize the CEMS systems monitor availability for the previous ~~quarter~~ calendar-half.