Florida Department of Environmental Protection

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Tallahassee, Florida 32399-2400

Rick Scott
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Herschel T. Vinyard Jr.
Secretary

PERMITTEE:

Florida Power Corporation dba Progress Energy, Florida Inc.
Crystal River Power Plant
299 First Avenue North
St. Petersburg, Florida 33701

ARMS Permit No.	0170004-034-AC
Facility ID No.	0170004
SIC No.	4911
Expires:	June 30, 2014

Authorized Representative:
Mr. Robby Odom, Manager

PROJECT AND LOCATION

This is the final air construction permit, which authorizes the construction/installation of a 20,000 cubic yard per year concrete batch plant and additional ancillary equipment (diesel pumps and air compressors) to support the repairs of the containment building that houses the Nuclear Unit (CR3). These units will also be used to support other future projects, as needed. The proposed work is being conducted at the existing Crystal River Power Plant, which is a power plant categorized under Standard Industrial Classification No. 4911. The existing plant is located north of Crystal River and west of U.S. Highway 19 in Citrus County, Florida. The UTM coordinates are Zone 17, 334.3 kilometers East and 3204.5 kilometers North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); 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.

STATEMENT OF BASIS

This air pollution construction permit 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 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

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

JFK/jh/th

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) 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 shown in the clerk's stamp to the persons listed below.

Mr. Robby Odom, Progress Energy Florida (robby.odom@pgnmail.com)
Mr. John Hunter, Progress Energy Florida (john.hunter@pgnmail.com)
Mr. Chris Bradley, Progress Energy Florida (chris.bradley@pgnmail.com)
Mr. Scott H. Osbourn, P.E., Golder Associates, Inc. (sosbourn@golder.com)
Ms. Cindy Zhang-Torres, SWD Office (cindy.zhang-torres@dep.state.fl.us)
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Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Ceron, EPA Region 4 (ceron.heather@epa.gov)
Ms. Lynn Scearce, DEP BAR Reading File (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.

_____ _____
(Clerk) (Date)

FACILITY DESCRIPTION

The existing Crystal River Power Plant consists of the following: four coal-fired fossil fuel steam generating (FFSG) units with electrostatic precipitators for the control of particulate matter emissions; two natural draft cooling towers; two sets of mechanical draft cooling towers (one set of "helper" cooling towers and a second set of "modular" cooling towers); coal and ash material handling facilities; relocatable diesel fired generators. FFSG Units 4 and 5 are also equipped with low-NO_X burners and selective catalytic reduction systems for the control of nitrogen oxide emissions and with flue gas desulfurization systems for the control of sulfur dioxide emissions. The Crystal River Energy Complex also includes a nuclear unit (CR3) which is not a source of air pollution and is not considered part of any air pollution permit, although certain emissions units associated with CR3 are included in the Title V permit.

PROJECT DESCRIPTION

This permit authorizes the construction/installation of a 20,000 cubic yard per year concrete batch plant, and additional ancillary equipment (diesel pumps and air compressors) to support the repair of the containment building that houses the nuclear unit (CR3); and, to support other future projects as needed. This project does not increase emissions above the PSD threshold significant rate levels or is above 5 tons per year for any pollutant.

In addition to the concrete batch plant, this project also includes the following miscellaneous ancillary equipment: nine (9) hydro-demolition diesel pumps with a rating of 475 horsepower (HP) each; two (2) water transfer diesel pumps with a rating of 20 HP each; and, twelve (12) air compressors with a rating of 575 HP each. The requested operating hours of the Concrete Batch Plant are 8,760 hours per year (hr/yr). The ancillary engines operating hours are projected to be as follows: the Hydro Demolition Diesel Pumps (9 units) will be operating up to 1,500 hr/yr total; the Water Transfer Diesel Pumps (2 units) will be operating up to 1,500 hr/yr total; and, the Air Compressors (12 units) will be operating up to a total of 144 hr/yr. Because these internal combustion engines are portable and not stationary emissions units, they are not subject to the New Source Performance Standards, 40 CFR 60, Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 60, Subpart JJJJ-Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. Similarly, they are not subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart ZZZZ-National Emission Standards for Reciprocating Internal Combustion Engines. These ancillary units are exempt from the requirement to obtain an air construction permit.

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The existing facility is subject to Power Plant Site Certification No. PA 77-09.

RELEVANT DOCUMENTS

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 02-17-2012
- Technical Evaluation and Preliminary Determination dated 04-03-2012

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Office of Permitting and Compliance (OPC), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Mail Station 5505, Tallahassee, Florida 32399-2400. The phone number 850/488-0114 and the fax number is 850/921-9533.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications should be submitted to the FDEP Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926. The phone number is 813/632-7600 and the fax number is 813/632-7668.

3. Terminology: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.

4. General Conditions: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit 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 Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 & 62-210.900, F.A.C.]

6. 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.]

7. Modifications: No emissions unit or facility subject to this permit 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) & 62-212.300(1)(a), F.A.C.]

8. Expiration: This air construction permit shall expire on June 30, 2014. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Office of Permitting and Compliance prior to the expiration of this permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C]

EU 031 - CONCRETE BATCH PLANT

This section of the permit addresses the following new emissions unit.

EU No.	Emissions Unit Description
033	Portable Concrete Batch Plant

Emissions Unit 033 is for the operation of a portable concrete batch plant. Plant operations at the facility will primarily consist of trucks delivering sand and aggregate to the site. Sand and aggregate will be stored in partially enclosed (covered and wallet on three sides) stockpiles. The sand and aggregate will then be transferred to hoppers via front end loaders. Cement and cement additives will be stored in sealed silos, which will be equipped with bin vent filters. The aggregate and sand will pass through weigh hoppers and then mixed with cement, cement additives, and water to manufacture concrete. The mixing will occur in trucks.

This concrete batch plant will support current and future maintenance and repair activities at the Crystal River facility. The proposed concrete batch plant will be provided by outside vendors on an as-needed basis.

This emissions unit is subject to the requirements of Rule 62-296.414 F.A.C., Concrete Batching Plants, which applies to facilities processing cement and other materials for the purposes of producing concrete. Emissions from this unit are particulate matter and visible emissions.

EQUIPMENT

1. Concrete Batch Plant. The permittee is authorized to construct/install a 20,000 cubic yard per year concrete batch plant. The use of a portable concrete batching plant that otherwise operates under the authority of a general permit pursuant to Rule 62-210.310(5), F.A.C. is allowed. However, while operating at this site, the conditions of this permit shall be complied with rather than the requirements of Rule 62-210.310(5), F.A.C. [Application Design and Rule 62-210.200 (PTE), F.A.C.]

   {Note: Any permits or authorizations that a contracted operator may hold to operate these portable units at other sites will have no enforceable affect while the units are operating under the authority of this permit, nor are they in any way invalidated for future use when the units are relocated elsewhere.}

EMISSIONS AND PERFORMANCE REQUIREMENTS

2. Hours of Operation. The concrete batch plant shall be allowed to operate 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C.]

3. Capacity. The permittee shall not exceed the capacity listed for each piece of equipment. [Rule 62-4.070(3), F.A.C.]

4. Emission Related Equipment. The permittee shall operate and maintain all emission related equipment associated with this permit in accordance with manufacturer specifications. If manufacturer specifications are not available, the permittee shall develop and implement procedures for the proper operation and maintenance of each piece of equipment. A copy of the manufacturer specifications or the operation and maintenance plan shall be kept on site and made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

5. Stack Emissions. Emissions from silos, weigh hoppers (batchers), and other enclosed storage and conveying equipment shall be controlled to the extent necessary to limit visible emissions to 5 percent opacity, measured by EPA Reference Method 9. [Rule 62-296.414, F.A.C.]

6. Unconfined Emissions. The owner or operator shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, roads, parking areas, stock piles, and yards as required by paragraph 62-296.320(4)(c), F.A.C.

   The following shall constitute reasonable precautions for these plants:

   a. Management of roads, parking areas, stock piles, and yards, which shall include one or more of the following:

(1) Paving and maintenance of roads, parking areas, and yards.
(2) Application of water or environmentally safe dust-suppressant chemicals when necessary to control emissions
(3) Removal of particulate matter from roads and other paved areas under control of the owner or operator to mitigage reentrainment, and from building or work areas to reduce airborne particulate matter.
(4) Reduction of stock pile height or installation of wind breaks to mitigage wind entrainment of particulate matter from stock piles.

b. Use of spray bar, chute, or partial enclosure to mitigage emissions at the drop point to the truck.

[Rules 62-296.414 & 62-296.320(4)(c), F.A.C.]

TEST METHODS AND PROCEDURES

7. Test Methods and Procedures. All emissions tests performed pursuant to the requirements of this subsection shall comply with the following requirements:
   a. The reference test method for visible emissions shall be EPA Method 9, as described at 40 CFR, Part 60, Appendix A, adopted and incorporated by reference at Rule 62-204.800, F.A.C.
   b. Test procedures shall conform to the procedures specified in Rule 62-297.310, F.A.C. All test results shall be reported to the Department in accordance with the provisions of Rule 62-297.310, F.A.C.
   c. Visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice. If emissions from the weigh hopper (batcher) operation are also controlled by the silo dust collector, the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing.
   d. If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing.

   [Rule 62-296.414, F.A.C.]

8. Frequency of Testing. The owner or operator of any concrete batching plant operating under the authority of this permit shall have a performance test conducted for visible emissions for each dust collector exhaust point no later then thirty (30) days after commencing operation on-site, and annually thereafter for each concrete batch plant that is maintained on-site for more than 12 consecutive months in an operational condition. [Rule 62-296.414, F.A.C.]

9. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

NOTIFICATION AND REPORTING REQUIREMENTS

10. Relocation Notification. Prior to relocating a portable concrete batching plant to this site, either PEF or the owner or operator of the contracted unit shall transmit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department's Southwest District Compliance Office at least five (5) business days prior to relocation. The notice shall identify the unit and estimate how long it will be onsite. The Department's Southwest District Compliance Office shall also be notified (by telephone, e-mail, fax, or written communication) upon removal of a portable concrete batching plant from this site. [Rule 62-4.070(3), F.A.C.]