

Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

PERMITTEE:

Florida Power Corporation dba Progress Energy, Florida Inc.
Crystal River Power Plant
100 Central Avenue, CN77
St. Petersburg, Florida 33701

ARMS Permit No.	0170004-014-AC
Facility ID No.	0170004
SIC No.	4911
Expires:	June 31, 2008

Authorized Representative:

Mr. Bernie M. Cumbie
Manager, Crystal River Fossil Plant & Operations

PROJECT AND LOCATION

This permit authorizes the replacement of the existing coal barge unloading system (consisting of a clamshell on a traveling gantry) with a new, modern hydraulic crane.

The project will be located at the existing Crystal River Power Plant, located North of Crystal River and West of U.S. 19 in Citrus County, Florida.

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 install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

APPENDICES

The following Appendix is attached as part of this permit.

Appendix GC	Construction Permit General Conditions
Appendix A	40 CFR 60, Subpart A Standard Conditions
Appendix Y	40 CFR 60, Subpart Y Standard Conditions



Joseph Kahn, Director
Division of Air Resource Management

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

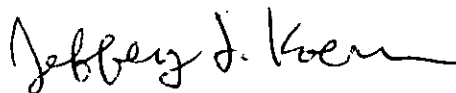
Mr. Bernie M. Cumbie, Manager
Florida Power Corporation dba Progress Energy, Florida Inc.
100 Central Avenue, CN77
St. Petersburg, Florida 33701

DEP File No. 0170004-014-AC
Crystal River Power Plant
Coal Yard Modification
Citrus County

Enclosed is Final Permit Number 0170004-014-AC. This permit authorizes Progress Energy to replace the existing coal barge unloading system (consisting of a clamshell bucket on a traveling gantry) with a new, modern hydraulic crane. This project does not allow an increase in the annual tons of coal that can be processed by the boilers; it merely allows for replacement of the old equipment with modern equipment that is capable of handling the same amount of coal more quickly. This permit is issued pursuant to Chapter 403, Florida Statutes.

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 thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



For

Trina L. Vielhauer, Chief
Bureau of Air Regulation

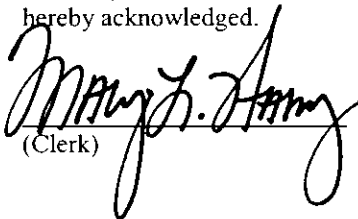
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit determination and the Final permit) was sent by electronic mail before the close of business on 12/15/06 to the person(s) listed:

Mr. Dave Meyer, Progress Energy, Florida Inc. (dave.meyer@pgnmail.com)
Mr. Scott Osbourn, P.E., Golder Associates (sosbourn@golder.com)
Ms. Cindy Zhang-Torres, P.E., DEP – SWD (cindy.zhang-torres@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.




(Clerk)


12/15/06
(Date)

Memorandum

Florida Department of Environmental Protection

TO: Joseph Kahn

THRU: Trina Vielhauer 
Jeff Koerner 

FROM: Jonathan Holtom 

DATE: December 7, 2006

SUBJECT: Project No. 0170004-014-AC
Final Construction Permit for PEF Crystal River Power Plant
Replacement of Coal Unloading Equipment.

Attached for approval and signature is a Final construction permit for Progress Energy Florida's Crystal River Power Plant. This permit authorizes the replacement of the existing coal barge unloading system (consisting of a clamshell on a traveling gantry) with a new, modern hydraulic crane. This project does not authorize any increases in heat input to any emissions units.

The Public Notice requirements were met on November 3 by publishing in The Citrus County Chronicle. No comments have been received from the public in response to this Public Notice, and no petitions were filed for an Administrative Hearing. Minor comments were received from the applicant and are addressed in the Final Determination.

I recommend your approval and signature.

Attachments

tlv/jk/jh

FINAL DETERMINATION

Progress Energy Florida, Inc.
Crystal River Power Plant
DEP File No. 0170004-014-AC

The Department distributed a public notice package on October 30, 2006, to authorize the replacement of the coal handling equipment at the Crystal River Power Plant, which is located North of Crystal River and West of U.S. 19 in Citrus County. The Public Notice of Intent to Issue was published in The Citrus County Chronicle on November 3, 2006.

COMMENTS/CHANGES

No comments were received from the public during the 14 (fourteen)-day public comment period, however, comments were received from the Permittee. The comments were not considered significant enough to reissue the Air Construction Permit and require another Public Notice; therefore, the Air Construction Permit was changed. Those comments, and minor changes, are addressed below.

Email from Mr. Scott Osbourn, P.E., dated November 15, 2006.

Comment 1. As we discussed following the Department's issuance of the draft permit, Progress Energy Florida (PEF) now plans to install a new crusher (for boilers 1 and 2, instead of increasing the crushing speed on the existing crusher).

Response 1. The crusher replacement will be a "like - kind" replacement, so that the coal handling capacity will be no different than what would have been achieved simply by increasing the speed of the existing crusher. The crusher will be located within the same building as the existing equipment and there will be no change in emissions. The Department does not have any objections to this change. As a result of this comment, the project description has been changed, as follows. Deletions are indicated by "~~striketrough~~" and additions are indicated by "double underline".

This permit authorizes the replacement of the existing coal barge unloading system (consisting of a clamshell bucket on a traveling gantry) with a new, modern hydraulic crane. This replacement will increase the barge unloading rate from 1,500 tons per hour and 16,000 tons per day to 2,500 tons per hour and 32,000 tons per day. In addition, the conveying capacity of the ~~coal crushers and conveyors that conveying transport~~ coal to units 1 and 2 will be increased from 600 tons per hour to 900 tons per hour, and the existing coal crusher for boilers 1 and 2 will be replaced with a new "like - kind" crusher that is rated for 900 tons per hour. These changes will decrease the time required to unload and to bunker coal to the boilers, allowing for a quicker recovery of coal inventory and more time for preventative maintenance of the conveying system. The amount of coal that can be processed annually by this material handling equipment is limited by each of the boiler's annual firing rates. This project does not allow an increase in the annual tons of coal that can be processed by the boilers; it merely allows for replacement of the old equipment with modern equipment that is capable of handling the same amount of coal more quickly.

Comment 2. Regarding Section III, Item 3 states - "The equipment that comprises the coal processing equipment at this facility (crushers, conveyors, drop points, and storage bunkers) shall be covered or enclosed at all times the equipment is in operation. (Application; design)" PEF requests that the following additional language be added: "The barge load-out conveyor and the stacker re-claimer sections of the conveyor belt are transversed by the loading equipment, (i.e. the barge unloader must

FINAL DETERMINATION

Progress Energy Florida, Inc.
Crystal River Power Plant
DEP File No. 0170004-014-AC

transverse the entire length of the barge, similarly the stacker re-claimer must transverse the coal pile to reclaim the coal) these belt sections by design are intended to be open. Any other open section, greater than 30 feet in length shall have an annual visual emission test, as outlined in the Test Methods and Procedures, Item 5."

Response 2. The Department will clarify that the barge load-out and stacker re-claimer are not required to be covered because they do not appear to be specifically regulated by 40 CFR 60, Subpart Y. However, when drafting the construction permit, the Department waived the Subpart Y requirement to perform annual visible emissions tests on the coal processing equipment because it was our understanding that it was all either covered or enclosed in a building. The applicant indicates that for the existing system some portions of the conveyors are not covered. Not finding any rationale for exempting up to 30 feet of uncovered conveyor sections from the testing requirement, Condition 3 has been changed as follows:

3. Containment of Fugitive Emissions: To the extent possible, the equipment that comprises the coal processing equipment at this facility (crushers, conveyors, drop points, and storage bunkers) shall be covered or enclosed at all times the equipment is in operation. Except for the barge load-out and the stacker re-claimer sections of the conveying system that are required by design to be open, and which are not specifically subject to regulation under 40 CFR 60, Subpart Y, any other open section of the coal processing equipment shall be required to have an annual visible emission test conducted upon it, as outlined in Condition 5. [Application; Design]

In addition, Condition 5 has been changed as follows:

5. Visible Emissions: When required by the Department, or annually as specified in Condition 3, EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity (see Appendix A - 40 CFR 60, Subpart A Standard Conditions, attached). [40 CFR 60.254(2)]

{Permitting Note: Except as specified in Condition 3, aAnnual testing is not being required because the regulated emissions points are either enclosed or confined within a building.}

These changes clarify the existing system and are not expected to result in any change in emissions.

CONCLUSION

The changes noted above are considered to be minor in nature and will not impact the emissions estimates or emissions characteristics of the noticed project. As such, these changes can be made to the draft permit following the public comment period without the need to publish a revised Public Notice. The final action of the Department is to issue the final permit with the changes noted above.

SECTION II. ADMINISTRATIVE REQUIREMENTS

FACILITY DESCRIPTION

This facility consists of four coal-fired fossil fuel steam generating (FFSG) units with electrostatic precipitators; two natural draft cooling towers for FFSG Units 4 and 5; helper mechanical cooling towers for FFSG Units 1, 2 and Nuclear Unit 3; coal, fly ash, and bottom ash handling facilities, and relocatable diesel fired generator(s).

PROJECT DESCRIPTION

This permit authorizes the replacement of the existing coal barge unloading system (consisting of a clamshell bucket on a traveling gantry) with a new, modern hydraulic crane. This replacement will increase the barge unloading rate from 1,500 tons per hour and 16,000 tons per day to 2,500 tons per hour and 32,000 tons per day. In addition, the conveying capacity of the conveyors that transport coal to units 1 and 2 will be increased from 600 tons per hour to 900 tons per hour, and the existing coal crusher for boilers 1 and 2 will be replaced with a new "like - kind" crusher that is rated for 900 tons per hour. These changes will decrease the time required to unload and to bunker coal to the boilers, allowing for a quicker recovery of coal inventory and more time for preventative maintenance of the conveying system. The amount of coal that can be processed annually by this material handling equipment is limited by each of the boiler's annual firing rates. This project does not allow an increase in the annual tons of coal that can be processed by the boilers; it merely allows for replacement of the old equipment with modern equipment that is capable of handling the same amount of coal more quickly.

REGULATORY CLASSIFICATION

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories as defined for Major Stationary Sources in Rule 62-210.200, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Based upon the construction permit application, the facility is a major source of hazardous air pollutants (HAPs).

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 07-14-06
- Technical Evaluation and Preliminary Determination dated 10-24-06-06

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 Bureau of Air Regulation (BAR), 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,

SECTION II. ADMINISTRATIVE REQUIREMENTS

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 31, 2008. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

EMISSIONS UNITS

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

ID	Emission Unit Description
016	Material handling activities for coal-fired steam units.

Emissions Unit 016 is material handling activities for coal-fired steam units. This emissions unit consists of the storage and transport of coal, fly ash and bottom ash for FFSG Units 1, 2, 4 and 5 and not addressed by other emissions units. Emissions are particulate matter and PM₁₀ from these activities.

{Permitting note(s): This emissions unit is regulated partially under Power Plant Siting Certification PA 77-09 (Units 4 and 5 only). The material handling activities are also regulated by PSD permit AC 09-162037 / PSD-FL-139; and, are subject to NSPS 40 CFR 60 Subpart Y.}

EQUIPMENT

1. Coal Unloading and Conveying Equipment: The permittee is authorized to construct a new hydraulic crane with a clamshell bucket on a traveling gantry to replace the existing clamshell bucket and traveling gantry system. This replacement will increase the barge unloading capabilities from 1,500 tons per hour and 16,000 tons per day to 2,500 tons per hour and 32,000 tons per day. The permittee is also authorized to increase the speed of the conveyors and the crusher associated with boilers 1 and 2 from 600 tons per hour to 900 tons per hour. [Application; Design]

EMISSIONS AND PERFORMANCE REQUIREMENTS

2. Hours of Operation: The coal unloading system shall be allowed to operate 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C.]
3. Containment of Fugitive Emissions: To the extent possible, the equipment that comprises the coal processing equipment at this facility (crushers, conveyors, drop points, and storage bunkers) shall be covered or enclosed at all times the equipment is in operation. Except for the barge load-out and the stacker re-claimer sections of the conveying system that are required by design to be open, and which are not specifically subject to regulation under 40 CFR 60, Subpart Y, any other open section of the coal processing equipment shall be required to have an annual visible emission test conducted upon it, as outlined in Condition 5. [Application; Design]

EMISSION LIMITATIONS AND STANDARDS

4. Visible emissions: Pursuant to 40 CFR 60.252(c), Standards for Particulate Matter, the owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. See attached Appendices A and Y. 40 CFR 60.252]

TEST METHODS AND PROCEDURES

5. Visible Emissions: When required by the department, or annually as specified in Condition 3., EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity (see Appendix A - 40 CFR 60, Subpart A Standard Conditions, attached). [40 CFR 60.254(2)]

{Permitting Note: Except as specified in Condition 3., annual testing is not being required because the regulated emissions points are either enclosed or confined within a building.}

6. 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

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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.]