Department of Environmental Protection

Jeb Bush
Governor

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.

Jeffery J. Koerner

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.

Mary L. Harry 12/15/06
(Clerk) (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 "~~strikethrough~~" 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

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, a~~A~~nnual 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.

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/PM_{10}), sulfur dioxide (SO_2), 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,

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]

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 PM_{10} 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

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.]

Golder Associates

August 31, 2006

0539556

Florida Department of Environmental Protection
North Permitting Section
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

RECEIVED
SEP 05 2006
BUREAU OF AIR REGULATION

Attention: Mr. Jonathan Holtom, P.E.

RE: REQUEST FOR ADDITIONAL INFORMATION REGARDING AIR CONSTRUCTION AND TITLE V PERMIT REVISION APPLICATION FILE NO.: 0170004-014-AC & 0170004-015-AV, CRYSTAL RIVER POWER PLANT – COAL UNLOADING MODIFICATION

Dear Mr. Holtom:

This correspondence provides the additional information requested by the Florida Department of Environmental Protection (Department or FDEP) concerning the Air Construction Application that was submitted by Progress Energy Florida (PEF), July 12, 2006. This information is presented in the same sequence as the requested information in the Department's letter dated August 10, 2006.

Comment 1: Page 5 of the combined air construction and Title V permit application needs to be completed and signed by the responsible official.

Response: DEP application form page 5 has been signed and is included in Attachment A.

Comment 2: On page 6 of the application in box 5 of the professional engineer's certification, item (4) needs to be checked in the second check box (for combined projects) instead of the first check box (for air construction permits).

Response: A revised DEP application form page 6, professional engineer's certification, is included in Attachment A.

Comment 3: On page 12 of the application, items 1 – 6 of the Additional Requirements for Title V Air Operation Permit Applications need to be addressed.

Response: A revised DEP application form page 12 is included in Attachment A.

Comment 4: On page 16 of the application, the Maximum Process or Throughput Rates are listed as 3,118,925 TPY coal for units 1 and 2, and 5,076,991 TPY coal for units 4 and 5, for a total of 8,195,916 TPY for all units combined. Please clarify whether this is the existing throughput capacity based on the current physical limitations of the combustors and associated fuel feed equipment, or if this will be the new throughput capacity after the completion of this project.

Response: The above coal throughput numbers are based on the permitted heat input for Crystal River units 1, 2, 4, & 5 and an assumed heating value of the coal:

- Units 1 & 2 – (3,750 + 4,795) mmbtu/hr x 8760 hr/yr x 1,000,000 btu/mmbtu x (1/12,000 btu/lb) x (1/2000 lb/t) = 3,118,925 tons
- Units 4 & 5 - (6,665 + 6,665) mmbtu/hr x 8760 hr/yr x 1,000,000 btu/mmbtu x (1/11,500 btu/lb) x (1/2000 lb/t) = 5,076,991 tons

Comment 5: On page 24 of the application, Section I. Emissions Unit Additional Information, item 2 is left blank. Please complete as appropriate.

Response: A revised DEP application form page 24 is included in Attachment A.

Comment 6: On page 25 of the application, Section I. Emissions Unit Additional Information, Additional Requirements for Title V Operation Permit Applications, items 1 -5 are left blank. Please complete as appropriate.

Response: A revised DEP application form page 25 is included in Attachment A.

Comment 7: What is the relationship, if any, between the requested coal yard modifications and any plans the company has to burn Powder River Basin coal on a continuing basis?

Response: There is no relationship between the coal yard modification project and the plans to burn Powder River Basin coal. The reason for replacing the barge unloader is the age of the current barge unloader and the ability to respond to market conditions for water deliveries. The reason for upgrading the conveyor belt to units 1 & 2 is to decrease the time it requires to bunker coal, allowing more time for maintenance. There is only one belt conveying coal to units 1 and 2, if this belt were to go down the units would run out of fuel.

Additional Information:

PEF is currently preparing an air construction permit application to be submitted to the Department that addresses CAIR and CAMR regulations (Crystal River Power Plant, Pollution Control Project Air Permit Application). In preparation of the Pollution Control Project application, PEF has updated fugitive emission estimates associated with the coal yard traffic. As such, PEF proposes to update the Coal Unloading Modification Project with these updated emission estimates. The emission estimate revision is due to updated unpaved road silt content. The current application emission estimates utilize an unpaved road silt content of 5% and the updated emissions provided are based on a more realistic silt content of 3%. This modification results in slightly lower estimated fugitive emissions from vehicle traffic in the coal yard. See Attachment B for the appropriate revised application pages.

PEF wishes to resolve all of the Department's questions as expeditiously as possible so that they may move forward with the proposed project in a timely manner. Please call me or Dave Meyer at (727) 820-5295, Progress Energy Florida, if you need any additional information.

Sincerely,

GOLDER ASSOCIATES INC.

Scott Osbourn, P.E.
Senior Consultant

David T. Larocca
Senior Project Engineer

DTL/dtl

Enclosures

cc: Ms. Mara Nasca, DEP, Southwest District Office
Mr. Dave Meyer, Progress Energy Florida
Mr. Bernie M Cumbie, Progress Energy Florida

ATTACHMENT A
REVISED APPLICATION FORMS

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   BERNIE M. CUMBIE, MANAGER, CRYSTAL RIVER FOSSIL PLANT & FUEL OPERATIONS

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - [X] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - [ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - [ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - [ ] The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **PROGRESS ENERGY**
   Street Address: **100 CENTRAL AVE CN77**
   City: **ST PETERSBURG** State: **FL** Zip Code: **33701**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(352) 563-4484** ext. Fax: **(352) 563-4496**

5. Application Responsible Official Email Address: **BERNIE.CUMBIE@PGNMAIL.COM**

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Bernie M Cumbie — Signature

9/1/06 — Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **SCOTT OSBOURN**
   Registration Number: **57557**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **5100 West Lemon St., Suite 114**
   City: **Tampa** State: **FL** Zip Code: **33609**
3. Professional Engineer Telephone Numbers...
   Telephone: **(813) 287-1717** ext.**211** Fax: **(813) 287-1716**
4. Professional Engineer Email Address: **SOSBOURN@GOLDER.COM**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

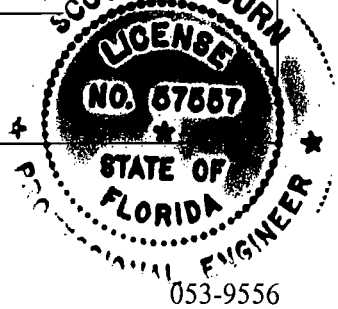
(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☒, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

8/31/06
Date

(seal)



* Attach any exception to certification statement.
** **Board of Professional Engineers Certificate of Authorization #00001670**

FACILITY INFORMATION

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:____ ☒ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:____
   ☒ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☐ Attached, Document ID:**N/A**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☒ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:____ ☒ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☒ Attached, Document ID:**See Part II** ☐ Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [1]
MATERIAL-HANDLING ACTIVITIES

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Drawing 11127** ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **See Part II** ☐ Previously Submitted, Date ____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☒ Previously Submitted, Date ____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ To be Submitted, Date (if known): ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: ____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [1]
MATERIAL-HANDLING ACTIVITIES

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: ____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: ____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: ____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **See Part II** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: ____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: ____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: ____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: ____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☒ Not Applicable

ATTACHMENT B
REVISED FUGITIVE EMISSION
APPLICATION PAGES

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **12.8**lb/hour **34.7**tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Part II** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **21.7** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Tables 1 through 3 of Part II. Hourly rate is based on the daily rate and 24 hr/day assumed operation.**	
11. Potential Fugitive and Actual Emissions Comment: **PSD applicability is based on past actual vs. future potential.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **5.17**lb/hour **12.52** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Part II** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **8.11** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Tables 1 through 3 of Part II. Hourly rate is based on daily rate and 24 hr/day assumed operation.**	
11. Potential Fugitive and Actual Emissions Comment: **PSD applicabitlity is based on past actual vs. future potential.**	

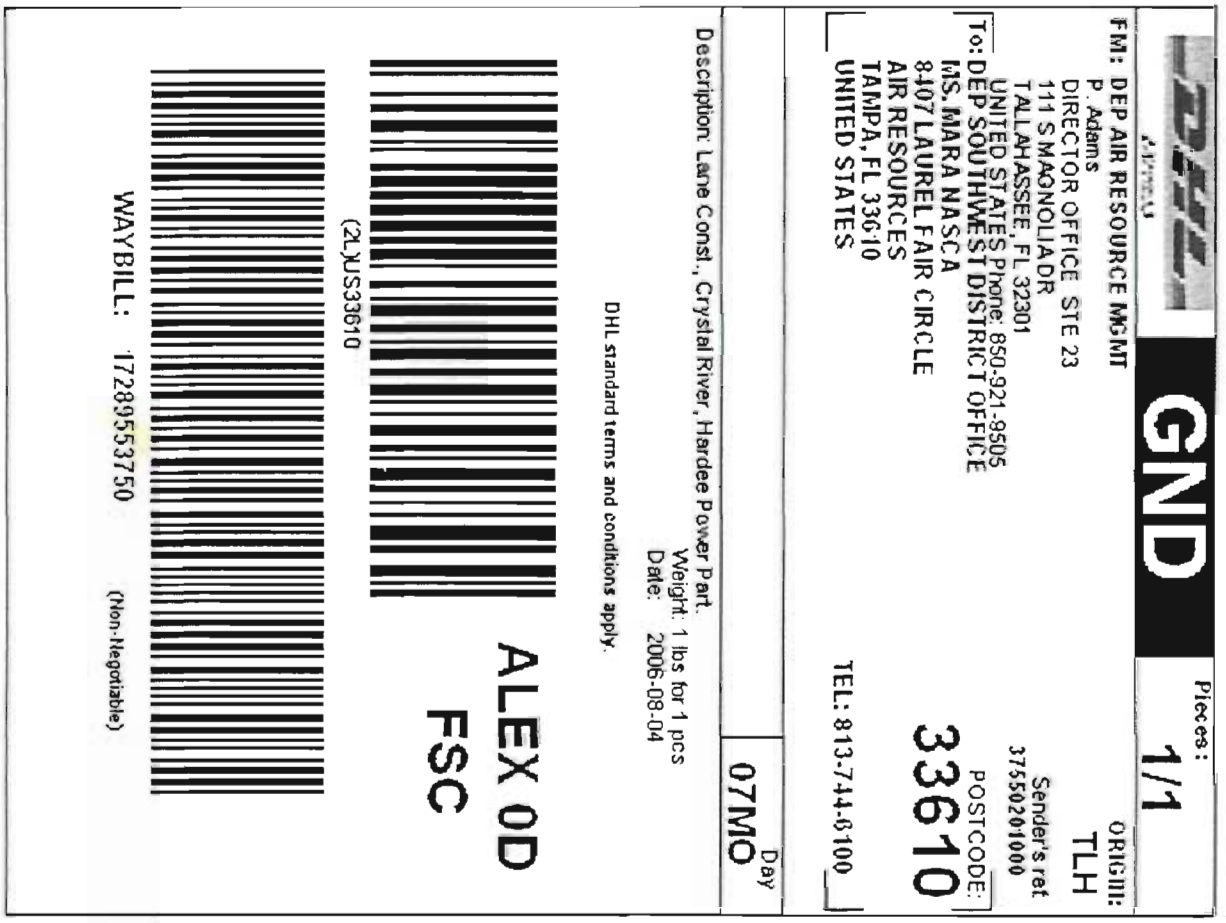
3.0 EMISSIONS

Emissions from the proposed modifications are particulate matter (PM) and PM_{10}. All conveyors are enclosed and are assumed to result in negligible fugitive emissions. Fugitive PM/PM_{10} emissions occur during drop operations from conveyor to conveyor and from conveyor to pile. A summary of the drop operations associated with the coal handling system is provided in Table 1. A summary of the past actual and future potential emissions is provided in Table 2. Table 3 presents a summary of coal yard vehicle traffic emissions. The net PM/PM_{10} emission changes associated with the proposed modifications are as follows:

	Past Actual Coal Yard Drop Operations (TPY)	**Past Actual Traffic (TPY)**	**Future Potential Coal Yard Operations (TPY)**	**Future Traffic (TPY)**	**Net Change (TPY)**	**PSD Threshold (TPY)**
PM	12.38	**9.33**	16.9	**17.8**	**13**	25
PM_{10}	5.94	**2.17**	8.1	**4.42**	**4.4**	15

Table 3. Unpaved Road Emissions

Original Source	Original Description	Past Actual Emissions: Vehicle Miles Traveled Annual	Vehicle Miles Traveled Daily	Hours Per Year Annual	Hours Per Day Daily	Annual TSP	Annual PM10	Daily TSP	Daily PM10	Future Potential Emissions: Vehicle Miles Traveled Annual	Vehicle Miles Traveled Daily	Hours Per Year Annual	Hours Per Day Daily	Annual TSP	Annual PM10	Daily TSP	Daily PM10	AP-42
		VMT/YR	VMT/DAY	HR/YR	HR/DAY	TPY	TPY	LB/D	LB/D	VMT/YR	VMT/DAY	HR/YR	HR/DAY	TPY	TPY	LB/D	LB/D	
MR-4	FEL Traffic	5,475	15			1.931	0.448	10.583	2.455	21,900	60			7.726	1.792	42.332	9.821	13.2.2 12/03
		5,475	15			1.178	0.273	6.455	1.498	21,900	60			4.712	1.093	25.821	5.990	13.2.2 12/03
CP-3	Front end loader	5,475	15			1.931	0.448	10.583	2.455					0.000	0.000	0.000	0.000	13.2.2 12/03
		5,475	15			1.178	0.273	6.455	1.498					0.000	0.000	0.000	0.000	13.2.2 12/03
CP-4	Scraper	4,200	200			0.265	0.119	25.250	11.358	7,300	20			0.627	0.475	3.437	2.605	
CP-5	Bulldozer			724	2	1.690	0.344	9.339	1.902			730	2	1.704	0.347	9.339	1.902	11.9 10/98
	Water Truck	2,738	8			1.153	0.267	6.315	1.465	7,300	20			3.073	0.713	16.841	3.907	13.2.2 12/03
	Total					9.327	2.174	74.980	22.630					17.843	4.421	97.769	24.225	



PEEL HERE PEEL HERE

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Using a photocopy could delay the delivery of your package and will result in additional shipping charge

SENDER'S RECEIPT
Waybill #: 17289553750

To(Company):
DEP Southwest District Office
Air Resources
8407 Laurel Fair Circle

Tampa, FL 33610
UNITED STATES

Attention To: Ms. Mara Nasca
Phone#: 813-744-6100

Sent By: P. Adams
Phone#: 850-921-9505

Rate Estimate: 3.1
Protection: Not Required
Description: Lane Const., Crystal River, Hardee Power Part.

Weight (lbs.): 1
Dimensions: 0 x 0 x 0

Ship Ref: 37550201000
Service Level: Ground (Est. delivery in 1 business day(s))

Special Svc:

Date Printed: 8/4/2006
Bill Shipment To: Sender
Bill To Acct: 778941286

DHL Signature (optional) _____ Route _____ Date _____ Time _____

For Tracking, please go to www.dhl-usa.com or call 1-800-225-5345

Thank you for shipping with DHL

Create new shipment ▶ View pending shipments Print waybill

DHL EXPRESS

Progress Energy

RECEIVED
JUL 14 2006
BUREAU OF AIR REGULATION

July 12, 2006

AC/AV

Mr. Jeff Koerner
FDEP
North Permitting Section
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

Re: Crystal River Facility - Title V Permit 0170004-011-AV - Coal Yard Modification
Air Construction Permit Application

Dear Mr. Koerner:

Attached is an air construction permit application to modify the coal yard at Crystal River. The coal yard modification consists of replacing the existing barge unloading system, consisting of a clamshell on traveling gantry, with a modern hydraulic crane with a clamshell bucket on a traveling gantry. Additionally, we plan to increase the coal capacity of the coal crushers and conveyors conveying coal to units 1 and 2 from 600 TPH to 900 TPH. This will decrease the time required to bunker coal to units 1 and 2 allowing more time for maintenance to this critical conveying system.

Thank you for your help in this matter. Please contact me at (727) 820-5295 if you have any questions.

Sincerely,

Patricia D. West

for Dave Meyer
Senior Environmental Specialist

xc: Mr. Bob Soich (cover letter)

Progress Energy Florida, Inc.
P.O. Box 14042
St. Petersburg, FL 33733

Gibson, Victoria

From: Koerner, Jeff
Sent: Friday, July 14, 2006 3:32 PM
To: Gibson, Victoria; Adams, Patty; Arif, Syed
Cc: Holtom, Jonathan
Subject: Crystal River - AC/AV Application to Increase Coal Unloading/Crushing Capacity

Vickie, Patty, Syed,

We received an application from PEF on July 14th. I assigned this to Jonathan for processing.

Thanks!

Jeff Koerner, BAR - Air Permitting North
Florida Department of Environmental Protection
850/921-9536

Patty,
Jeff probably passed on the one copy I gave him to Jonathan.
Vickie

AIR CONSTRUCTION PERMIT APPLICATION
COAL YARD MODIFICATION PROJECT
CRYSTAL RIVER ENERGY COMPLEX
CRYSTAL RIVER, CITRUS COUNTY, FLORIDA

Submitted to:

Progress Energy Florida
100 Central Avenue
St. Petersburg, Florida 33701

Submitted by:

Golder Associates Inc.
5100 West Lemon Street
Suite 114
Tampa, Florida 33609

Distribution:

4 Copies	Department of Environmental Protection
2 Copies	Progress Energy Florida
2 Copies	Golder Associates Inc.

July 2006 053-9556

PART I – FDEP APPLICATION FOR AIR PERMIT

PART II – PSD APPLICATION

LIST OF TABLES

LIST OF FIGURES

PART I

FDEP APPLICATION FOR AIR PERMIT

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **PROGRESS ENERGY FLORIDA, INC.**
2. Site Name: **CRYSTAL RIVER POWER PLANT**
3. Facility Identification Number: **0170004**
4. Facility Location...:
   Street Address or Other Locator: **NORTH OF CRYSTAL RIVER, WEST OF U.S. 19**
   City: **CRYSTAL RIVER** County: **CITRUS** Zip Code: **34428**
5. Relocatable Facility? ☐ Yes ☒ No
6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **DAVE MEYER, SENIOR ENVIRONMENTAL SPECIALIST**
2. Application Contact Mailing Address...
   Organization/Firm: **PROGRESS ENERGY FLORIDA**
   Street Address: **100 CENTRAL AVE CX1B**
   City: **ST. PETERSBURG** State: **FL** Zip Code: **33701**
3. Application Contact Telephone Numbers...
   Telephone: **(727) 820-5295** ext. Fax: **(727) 820-5229**
4. Application Contact Email Address: **DAVE.MEYER@PGNMAIL.COM**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 7-14-06
2. Project Number(s): 0170004-014-AC
3. PSD Number (if applicable):
4. Siting Number (if applicable):

0170004-015-AV

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

X Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

X I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Progress Energy is proposing to replace the barge unloading system, consisting of a clamshell on traveling gantry, with a modern hydraulic crane with a clamshell bucket on a traveling gantry, increasing the barge unloading rate from 1,500 to 2,500 tons per hour (TPH). In addition, Progress Energy proposes to increase the coal capacity of the coal crushers and conveyors C9, C4, C5, C6, C7, and C8 from 600 TPH to 900 TPH. See Part II.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
016	Material-Handling Activities for Coal Fired Steam Units		NA

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
   BERNIE M. CUMBIE, MANAGER, CRYSTAL RIVER FOSSIL PLANT & FUEL OPERATIONS
2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **PROGRESS ENERGY**
   Street Address: **100 CENTRAL AVE CN77**
   City: **ST PETERSBURG** State: **FL** Zip Code: **33701**
3. Owner/Authorized Representative Telephone Numbers...
   Telephone: (**352**) **563-4484** ext. Fax: (**352**) **563-4496**
4. Owner/Authorized Representative Email Address: **BERNIE.CUMBIE@PGNMAIL.COM**
5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

Bernie M Cumbie — Signature

6/30/06 — Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☐ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

4. Application Responsible Official Telephone Numbers...
   Telephone: ( ) - ext. Fax: ( ) -

5. Application Responsible Official Email Address:

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Signature Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **SCOTT OSBOURN**
   Registration Number: **57557**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **5100 West Lemon St., Suite 114**
   City: **Tampa** State: **FL** Zip Code: **33609**
3. Professional Engineer Telephone Numbers...
   Telephone: (**813**) **287-1717** ext.**211** Fax: (**813**) **287-1716**
4. Professional Engineer Email Address: **SOSBOURN@GOLDER.COM**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

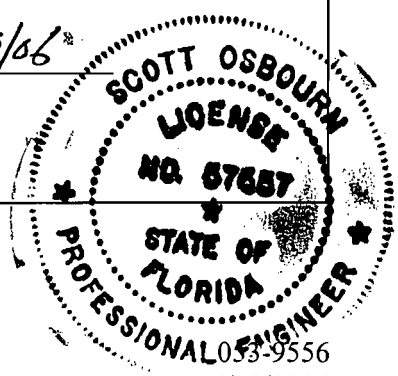
(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature Date 6/28/06

(seal)



* Attach any exception to certification statement.
** **Board of Professional Engineers Certificate of Authorization #00001670**

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **334.3** North (km) **3204.5**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **28/57/34** Longitude (DD/MM/SS) **82/42/01**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s):
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **DAVE MEYER, SENIOR ENVIRONMENTAL SPECIALIST**
2. Facility Contact Mailing Address... Organization/Firm: **PROGRESS ENERGY** Street Address: **100 CENTRAL AVE CX1B** City: **ST PETERSBURG** State: **FL** Zip Code: **33701**
3. Facility Contact Telephone Numbers: Telephone: **(727) 820-5295** ext. Fax: **(727) 820-5229**
4. Facility Contact Email Address: **DAVE.MEYER@PGNMAIL.COM**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
CO	A	N
NOx	A	N
PB	A	N
PM	A	N
PM10	A	N
SO2	A	N
VOC	A	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID:_ ☒ Previously Submitted, Date:____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID:____ ☒ Previously Submitted, Date:____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID:____ ☒ Previously Submitted, Date:____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: ☐ Attached, Document ID:____ ☒ Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): ☒ Attached, Document ID:**PART II**
3. Rule Applicability Analysis: ☒ Attached, Document ID:**PART II**
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: ☒ Attached, Document ID:**PART II** ☐ Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable

FACILITY INFORMATION

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:____ ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:____
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☐ Attached, Document ID:____
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:____ ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **Material-handling activities for coal-fired steam units.**

3. Emissions Unit Identification Number: **EU016**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**8/15/06**		**49**	☐ Yes ☒ No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment: **This emission unit consists of transport and storage of coal, flyash, and bottom ash for FFSG Units 1, 2, 4, and 5.**

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
   Dust suppression by water sprays
   Miscellaneous control devices - enclosures
   Dust suppression - traffic control

   (Refer to Condition H.3 of the current TV Permit No. 0170004-009-AV, which references Progress Energy's Best Management Plan (BMP) for particulate emissions)

2. Control Device or Method Code(s): **061**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **3,118,925 TPY coal for Units 1 and 2.**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24hours/day	**7**days/week
52weeks/year	**8760**hours/year

6. Operating Capacity/Schedule Comment:
5,076,991 TPY coal for Units 4 and 5. 8,195,916 TPY for all units combined. Maximum process throughput rate is based on boiler maximum firing rate and lower range of the coal heating value.

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Various - 016**	2. Emission Point Type Code: **4**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Barge unloading, rail unloading, coal crushing, various conveyors and transfer points, storage piles and manipulation activities, storage silos, and unpaved road emissions from coal yard equipment.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: **77°F**	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **Various** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Fugitive emissions at ambient temperature.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Coal Transport for Units 1 and 2.**		
2. Source Classification Code (SCC):	3. SCC Units: **Tons Transferred**	
4. Maximum Hourly Rate: **900**	5. Maximum Annual Rate: **3.118,925**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Propose to increase coal capacity of coal crushers and conveyors (conveyors C9, C4, C5, C6, C7, and C8) from 600 TPH to 900 TPH. These conveyors transport coal from the reclaim hopper to Boiler Units 1 and 2 silos. Maximum annual rate based on maximum firing rate of Units 1 and 2.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Coal Transport for Units 4 and 5**		
2. Source Classification Code (SCC):	3. SCC Units: **Tons Transferred**	
4. Maximum Hourly Rate: **2,500**	5. Maximum Annual Rate: 5,076,991	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Propose to increase barge unloading from 1,500 TPH to 2,500 TPH. Conveyors from barge to Boilers Units 4 and 5 are already rated for a capacity of 2,500 TPH, therefore no changes to these conveyors are needed. Maximum annual rate based on maximum firing rate of Units 4 and 5.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	061		WP
PM10	061		WP

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **14.7**lb/hour **43**tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Part II** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **26.6** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Tables 1 through 3 of Part II. Hourly rate is based on the daily rate and 24 hr/day assumed operation.**	
11. Potential Fugitive and Actual Emissions Comment: **PSD applicability is based on past actual vs. future potential.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **5.81** lb/hour **15.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Part II** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **9.64** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Tables 1 through 3 of Part II. Hourly rate is based on daily rate and 24 hr/day assumed operation.**	
11. Potential Fugitive and Actual Emissions Comment: **PSD applicabitlity is based on past actual vs. future potential.**	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Drawing 11127** ☐ Previously Submitted, Date ____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☒ Previously Submitted, Date ____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ To be Submitted, Date (if known): ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: ____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [1]
MATERIAL-HANDLING ACTIVITIES

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: ____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: ____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: ____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: ____ ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: ____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: ____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: ____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: ____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Not Applicable

Additional Requirements Comment

PART II

PSD APPLICATION FOR THE PROPOSED COAL YARD MODIFICATIONS PROGRESS ENERGY'S CRYSTAL RIVER ENERGY COMPLEX.

1.0 EXISTING FACILITY DESCRIPTION

Crystal River Energy Complex 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).

The facility also includes miscellaneous unregulated/insignificant emissions units and/or activities. A summary of the emission units is as follows:

E.U. ID No.	Brief Description
001	Fossil Fuel Steam Generator (FFSG), Unit 1
002	FFSG, Unit 2
004	FFSG, Unit 4
003	FFSG, Unit 5
006	Fly ash transfer (Source 1) from FFSG Unit 1
008	Fly ash storage silo (Source 3) for FFSG Units 1 and 2
009	Fly ash transfer (Source 4) from FFSG Unit 2
010	Fly ash transfer (Source 5) from FFSG Unit 2
014	Bottom ash storage silo for FFSG Units 1 and 2, with associated vacuum blower exhausts and bin vent filter (total of three emission points)
7775047, 001	Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts.
013	Cooling towers for FFSG Units 1, 2, and 3, used to reduce plant discharge water temperature
015	Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature
016	Material handling activities for coal-fired steam units

Unregulated Emissions Units and/or Activities	
017	Fuel and lube oil tanks and vents
018	Sewage treatment, water treatment, lime storage
019	Three 3500 kW diesel generators associated with Unit 3

Insignificant Emission Units
1. Vehicle diesel and gasoline tanks.
2. Diesel fire pump and tank at Unit 1.
3. Diesel fire pump and tank at Unit 3 (FWP-7)
4. Diesel pump driver for emergency feedwater (1,670 BHP)
5. Diesel generator for security bldg and system (backup)
6. 260 kW emergency diesel generator at Unit 3 technical support center.
7. Unit 3 diesel generator air compressor.
8. Unit 3 halon fire protection system.
9. Fire pump house emergency diesel generator units and electric generator units.
10. Laboratory facilities
11. CEM equipment and calibration gas storage and venting.
12. Surface coating of less than 6.0 gallons per day.
13. Brazing, soldering and welding.
14. Grounds maintenance.
15. Miscellaneous gas and diesel engines.
16. Miscellaneous material handling facilities.
17. Parts washers.
18. Miscellaneous material cleaning equipment (e.g., self contained and sand blasting).

2.0 PROPOSED PROJECT

Progress Energy proposes to make modifications to Emission Unit (EU) 016. This emission unit designation represents material handling activities for the coal-fired steam units, including the storage and transport of coal, fly ash and bottom ash handling for fossil fuel steam generator (FFSG) Units 1, 2, 4 and 5, not addressed by other emissions units. This proposed project only affects the coal handling and storage activities associated with EU 016. A description of the existing activities and the proposed modifications follows.

Coal is brought into the facility by barge and rail car. Coal is conveyed from both barge and rail to storage and to the boilers via various conveyors and crusher stations. Once received at the boilers, coal is stored in silos. The current coal conveyor system is shown in Drawing No. 11127-2-009.

The proposed modifications include the following:

- Replace the barge unloading system, consisting of a clamshell on traveling gantry, with a modern hydraulic crane with a clamshell bucket on a traveling gantry (see Drawing No. 11127-2-009). This modification will increase the speed of unloading coal barges. The current system is rated at approximately 1,500 TPH and 16,000 TPD. The modification will increase this rate to a nominal 2,500 TPH and 32,000 TPD. The annual coal usage and plant bunkering is based on the capacity of the boilers and these proposed changes will not change the operation of the boilers and as such will not increase the average annual coal unloading. There may be some variation in coal shipments (up or down) due to on site inventory adjustments.

- Increase the coal capacity of the coal crushers and conveyors C9, C4, C5, C6, C7, and C8 from 600 TPH to 900 TPH. This will decrease the time required to fill the existing Unit Nos. 1 and 2 coal silos but will not affect the existing boiler operating parameters.

The potential to emit is based on the maximum potential coal utilization for the coal-fired units (Units 1, 2, 4 and 5) and the lower range of the coal heating value. As a comparison, the PM emissions are based on 8.2 million tons of coal per year (i.e., 3.1 million tons for Units 1 and 2 and 5.1 million tons for Units 4 and 5), while the maximum potential capability at 1,500 TPH is 13.14 million TPY and at 2,500 TPH is 21.9 million TPY. Indeed, the conveyor system rate change will primarily allow the transfer of coal from the barge to the storage area at a faster rate and will not significantly increase the annual rate, as this is limited by the utilization of the coal-fired units (the boiler heat input and the heating value of the coal).

3.0 EMISSIONS

Emissions from the proposed modifications are particulate matter (PM) and PM_{10}. All conveyors are enclosed and are assumed to result in negligible fugitive emissions. Fugitive PM/PM_{10} emissions occur during drop operations from conveyor to conveyor and from conveyor to pile. A summary of the drop operations associated with the coal handling system is provided in Table 1. A summary of the past actual and future potential emissions is provided in Table 2. Table 3 presents a summary of coal yard vehicle traffic emissions. The net PM/PM_{10} emission changes associated with the proposed modifications are as follows:

	Past Actual Coal Yard Drop Operations (TPY)	Past Actual Traffic (TPY)	Future Potential Coal Yard Operations (TPY)	Future Traffic (TPY)	Net Change (TPY)	PSD Threshold (TPY)
PM	12.38	14.2	16.9	26.2	16.5	25
PM_{10}	5.94	3.7	8.1	7.2	5.7	15

4.0 RULE APPLICABILITY

The facility is currently permitted under Title V Permit No. 0170004-009-AV. The facility is a major source of hazardous air pollutants (HAPs).

Emission Unit 016 is regulated partially under Power Plant Siting Certification PA 77-09; NSPS 40 CFR 60 Subpart Y (Units 4 and 5 only); and PSD permit AC 09-162037, PSD-FL-139.

5.0 PSD REVIEW

Under Federal and State of Florida PSD review requirements, all major new or modified sources of air pollutants regulated under the Clean Air Act (CAA) must be reviewed and a pre-construction permit issued. EPA has approved Florida's State Implementation Plan (SIP), which contains PSD regulations; therefore, PSD approval authority has been granted to the FDEP.

A "major facility" is defined as any one of 28 named source categories that have the potential to emit 100 TPY or more, or any other stationary facility that has the potential to emit 250 TPY or more of any pollutant regulated under the CAA. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant after the application of control equipment. Once a new source is determined to be a "major facility" for a particular pollutant, any pollutant emitted in amounts greater than the PSD significant emission rates is subject to PSD review. For an existing source for which a modification is proposed, the modification is subject to PSD review if the net increase in emissions due to the modification is greater than the PSD significant emission rates.

As demonstrated in the above table, the maximum annual emissions increase due to the proposed modifications will not exceed the respective PSD significant emission rate for PM/PM_{10}. Therefore, PSD review is not applicable to the project.

TABLES

Table 1. Coal Yard Drop Operations

Segment	ID	Description	Drop	
A				
Barge to Units 1 & 2				
			Drops	
	B-1	Clamshell to hopper	1	open
	B-2	Hopper to belt	2	
	B-3	Belt to C1	3	
	TP1-1	C1 to C2	4	
	TP3	C2 to C4A/B	5	
	C building	C4A/B to surge bin	6	
	C building	Surge bin to feeder		
	C building	Feeder to crusher		
	C building	Crusher to C5 A/B	7	crusher
	Plant	C5 to surge hopper	8	
	Plant	Surge hopper to C7	9	
	Plant	C7 to C8	10	
	Plant	C8 to Silo	11	
B				
Barge to ground (SR) to Units 1 & 2				
	B-1	Clamshell to hopper	1	open
	B-2	Hopper to belt	2	
	B-3	Belt to C1	3	
	TP1-1	C1 to C2	4	
	TP3	C2 to C3	5	
	SR	C3 to SR1	6	
	SR	SR1 to SR2	7	
	SR	SR2 to coal pile	8	open
	SR	Bucket wheel to SR2	9	open
	SR	Belt to belt	10	
	SR	Belt to C3	11	
	TP3	C3 to C4A/B	12	
	C building	C4A/B to surge bin	13	
	C building	Surge bin to feeder		
	C building	Feeder to crusher		
	C building	Crusher to C5 A/B	14	crusher
	Plant	C5 to surge hopper	15	
	Plant	Surge hopper to C7	16	
	Plant	C7 to C8	17	
	Plant	C8 to Silo	18	
C				
Barge to Units 4 & 5				
	New Source	Description		
	B-1	Clamshell to hopper	1	open
	B-2	Hopper to belt	2	
	B-3	Belt to C1	3	
	TP1-1	C1 to C2	4	
	TP3	C2 to C29A	5	
	TP 24-1	C29A TO C30A	6	
	TP25-1	C30A TO C31B	7	
	TP26-1	C31B TO C33A	8	
	TP27-1	C33A TO C35A/B	9	
	C building	C35A/B to surge bin	10	
	C building	Surge bin to c feeder		
	C building	Feeder to crusher		

Table 1. Coal Yard Drop Operations

Segment	ID	Description	Drop	
	C building	Crusher to C36A/B	11	crusher
	Plant	C36A/B to C502	12	
	Plant	C502 to C504	13	
	Plant	C504 to silo	14	
D				
Barge to ground (SR) to Units 4 & 5				
	B-1	Clamshell to hopper	1	open
	B-2	Hopper to belt	2	
	B-3	Belt to C1	3	
	TP1-1	C1 to C2	4	
	TP3	C2 to C29A	5	
	TP 24-1	C29A TO C30A	6	
	TP25-1	C30A TO C31B	7	
	TP26-1	C31B TO C33A	8	
	TP27-1	C33A TO C34	9	
	SR	C34 TO Hopper	10	
	SR	Hopper to belt	11	
	SR	Belt to belt	12	
	SR	Belt to coal pile	13	open
	SR	Bucket wheel to belt	14	open
	SR	Belt to belt	15	
	SR	Belt to C34	16	
	TP27-1	C34 TO C35A/B	17	
	C building	C35A/B to surge bin	18	
	C building	Surge bin to c feeder		
	C building	Feeder to crusher		
	C building	Crusher to C36A/B	19	crusher
	Plant	C36A/B to C502	20	
	Plant	C502 to C504	21	
	Plant	C504 to silo	22	
E				
Rail to Units 1 & 2				
			Drops	
	R unloader	Rail car to hopper	1	open
	R unloader	V feeder to C10	2	
	R unloader	C10 to C11	3	
	TP23	C11 to C13	4	
	TP24	C13 to C29B	5	
	TP3	C29B to C4A/B	6	
	C building	C4A/B to surge bin	7	
	C building	Surge bin to feeder		
	C building	Feeder to crusher		
	C building	Crusher to C5 A/B	8	crusher
	Plant	C5 to surge hopper	9	
	Plant	Surge hopper to C7	10	
	Plant	C7 to C8	11	
	Plant	C8 to Silo	12	
F				
Rail to ground (SR) to Units 1 & 2				
	R unloader	Rail car to hopper	1	open
	R unloader	V feeder to C10	2	
	R unloader	C10 to C11	3	
	TP23	C11 to C13	4	
	TP24	C13 to C29B	5	

Table 1. Coal Yard Drop Operations

Segment	ID	Description	Drop	
	TP3	C29B to C3	6	
	SR	C3 to SR1	7	
	SR	SR1 to SR2	8	
	SR	SR2 to coal pile	9	open
	SR	Bucket wheel to SR2	10	open
	SR	Belt to belt	11	
	SR	Belt to C3	12	
	TP3	C3 to C4A/B	13	
	C building	C4 A/B to surge bin	14	
	C building	Surge bin to feeder		
	C building	Feeder to crusher		
	C building	Crusher to C5 A/B	15	crusher
	Plant	C5A/B to surge hopper	16	
	Plant	Surge hopper to C7	17	
	Plant	C7 to C8	18	
	Plant	C8 to Silo	19	
G				
Rail to Units 4 & 5				
	R unloader	Rail car to hopper	1	open
	R unloader	V feeder to C10	2	
	R unloader	C10 to C11	3	
	TP23	C11 to C13	4	
	TP24	C13 to C30A	5	
	TP25-1	C30A TO C31B	6	
	TP26-1	C31B TO C33A	7	
	TP27-1	C33A TO C35A/B	8	
	C building	C35A/B to surge bin	9	
	C building	Surge bin to c feeder		
	C building	Feeder to crusher		
	C building	Crusher to C36A/B	10	crusher
	Plant	C36A/B to C502	11	
	Plant	C502 to C504	12	
	Plant	C504 to silo	13	
H				
Rail to ground (SR) to Units 4 & 5				
	R unloader	Rail car to hopper	1	open
	R unloader	V feeder to C10	2	
	R unloader	C10 to C11	3	
	TP23	C11 to C13	4	
	TP24	C13 to C30A	5	
	TP25-1	C30A TO C31B	6	
	TP26-1	C31B TO C33A	7	
	TP27-1	C33A TO C34	8	
	SR	C34 TO Hopper	9	
	SR	Hopper to belt	10	
	SR	Belt to belt	11	
	SR	Belt to coal pile	12	open
	SR	Bucket wheel to belt	13	open
	SR	Belt to belt	14	
	SR	Belt to C34	15	
	TP27-1	C34 TO C35A/B	16	
	C building	C35A/B to surge bin	17	
	C building	Surge bin to c feeder		
	C building	Feeder to crusher		

Table 1. Coal Yard Drop Operations

Segment	ID	Description	Drop	
	C building	Crusher to C36A/B	18	crusher
	Plant	C36A/B to C502	19	
	Plant	C502 to C504	20	
	Plant	C504 to silo	21	

Table 2. Coal Yard Emissions - Past Actual and Future Potential

Segment		Annual	Daily*	Past Actual: Annual Coal Throughput (TPY)	Past Actual: Daily Coal Throughput (TPD)	Past Actual: Annual Emissions TSP (TPY)	Past Actual: Annual Emissions PM10 (TPY)	Past Actual: Daily Emissions TSP (LB/Day)	Past Actual: Daily Emissions PM10 (LB/Day)	New Configuration - plant at full load all year: Annual Coal Throughput (TPY)	New Configuration - plant at full load all year: Daily Coal Throughput (TPD)	New Configuration - plant at full load all year: Annual Emissions TSP (TPY)	New Configuration - plant at full load all year: Annual Emissions PM10 (TPY)	New Configuration - plant at full load all year: Daily Emissions TSP (LB/Day)	New Configuration - plant at full load all year: Daily Emissions PM10 (LB/Day)	AP-42 Equations
A	Barge to Units 1 & 2															
	Drops inclosed	9	9	43,389	0	0.017	0.008	0.000	0.000	7,797	0	0.003	0.001	0.000	0.000	13.2.4 1/95
	Drops open	1	1	43,389	0	0.019	0.009	0.000	0.000	7,797	0	0.003	0.002	0.000	0.000	13.2.4 1/95
	Crusher			43,389	0	0.022	0.011	0.000	0.000	7,797	0	0.004	0.002	0.000	0.000	
B	Barge to ground to Units 1& 2															
	Drops inclosed	14	6	824,391	0	0.493	0.233	0.000	0.000	148,149	0	0.089	0.042	0.000	0.000	13.2.4 1/95
	Drops open	3	2	824,391	0	1.057	0.500	0.000	0.000	148,149	0	0.190	0.090	0.000	0.000	13.2.4 1/95
	Crusher			824,391	0	0.412	0.206	0.000	0.000	148,149	0	0.074	0.037	0.000	0.000	
C	Barge to Units 4 & 5															
	Drops inclosed	12	12	1,093,338	13,000	0.561	0.265	19.957	9.439	2,193,260	13,000	1.125	0.532	19.957	9.439	13.2.4 1/95
	Drops open	1	1	1,093,338	13,000	0.467	0.221	16.630	7.866	2,193,260	13,000	0.937	0.443	16.630	7.866	13.2.4 1/95
	Crusher			1,093,338	13,000	0.547	0.273	13.000	6.500	2,193,260	13,000	1.097	0.548	13.000	6.500	
D	Barge to ground to Units 4 & 5															
	Drops inclosed	18	11	538,510	3,000	0.414	0.196	4.222	1.997	1,462,173	19,000	1.125	0.532	26.737	12.646	13.2.4 1/95
	Drops open	3	2	538,510	3,000	0.690	0.327	7.676	3.630	1,462,173	19,000	1.875	0.887	48.612	22.992	13.2.4 1/95
	Crusher			538,510	0	0.269	0.135	0.000	0.000	1,462,173	0	0.731	0.366	0.000	0.000	
E	Rail to Units 1 & 2															
	Drops inclosed	10	10	65,084	8,400	0.028	0.013	10.746	5.082	148,149	8,400	0.063	0.030	10.746	5.082	13.2.4 1/95
	Drops open	1	1	65,084	8,400	0.028	0.013	10.746	5.082	148,149	8,400	0.063	0.030	10.746	5.082	13.2.4 1/95
	Crusher			65,084	8,400	0.033	0.016	8.400	4.200	148,149	8,400	0.074	0.037	8.400	4.200	
F	Rail to ground to Units 1& 2															
	Drops inclosed	15	7	1,236,587	15,850	0.793	0.375	14.193	6.713	2,814,830	15,850	1.805	0.853	14.193	6.713	13.2.4 1/95
	Drops open	3	2	1,236,587	15,850	1.586	0.750	40.553	19.180	2,814,830	15,850	3.609	1.707	40.553	19.180	13.2.4 1/95
	Crusher			1,236,587	15,850	0.618	0.309	15.850	7.925	2,814,830	0	1.407	0.704	0.000	0.000	
G	Rail to Units 4 & 5															
	Drops inclosed	11	11	1,640,007	0	0.771	0.365	0.000	0.000	852,934	0	0.401	0.190	0.000	0.000	13.2.4 1/95
	Drops open	1	1	1,640,007	0	0.701	0.332	0.000	0.000	852,934	0	0.365	0.172	0.000	0.000	13.2.4 1/95
	Crusher			1,640,007	0	0.820	0.410	0.000	0.000	852,934	0	0.426	0.213	0.000	0.000	
H	Rail to ground to Units 4 & 5															
	Drops inclosed	17	10	807,765	0	0.587	0.278	0.000	0.000	568,623	0	0.413	0.195	0.000	0.000	13.2.4 1/95
	Drops open	3	2	807,765	0	1.036	0.490	0.000	0.000	568,623	0	0.729	0.345	0.000	0.000	13.2.4 1/95
	Crusher			807,765	0	0.404	0.202	0.000	0.000	568,623	0	0.284	0.142	0.000	0.000	
I	Pyrites															
	Drops inclosed	10	10	2,600	65	0.001	0.001	0.083	0.039	2,600	120	0.001	0.001	0.154	0.073	13.2.4 1/95
	Drops open	1	1	2,600	65	0.001	0.001	0.083	0.039	2,600	120	0.001	0.001	0.154	0.073	13.2.4 1/95
	Crusher			2,600	65	0.001	0.001	0.065	0.033	2,600	120	0.001	0.001	0.120	0.060	
	Total					12.375	5.937	162.203	77.726			16.896	8.102	210.001	99.906	

Note: AP-42 13.2.4: lb/ton = k(0.0035) x {[(U/5)^1.3] / [(M/2)^1.4]} where: k = 0.35 for PM10 and 0.74 for TSP, M = 7% Moisture, U = 8.8 MPH for Annual Average and 12 MPH for Daily Average

* The daily value is less because the coal is conveyed to ground.

Table 3. Unpaved Road Emissions

		Past Actual Emissions								Future Potential Emissions								
Original Source	Original Description	Vehicle Miles Traveled Annual VMT/YR	Vehicle Miles Traveled Daily VMT/DAY	Hours Per Year Annual HR/YR	Hours Per Day Daily HR/DAY	Annual TSP TPY	Annual PM10 TPY	Daily TSP LB/D	Daily PM10 LB/D	Vehicle Miles Traveled Annual VMT/YR	Vehicle Miles Traveled Daily VMT/DAY	Hours Per Year Annual HR/YR	Hours Per Day Daily HR/DAY	Annual TSP TPY	Annual PM10 TPY	Daily TSP LB/D	Daily PM10 LB/D	AP-42
MR-4	FEL Traffic	5,475	15			2.762	0.710	15.132	3.888	21,900	60			11.047	2.838	60.529	15.553	13.2.2 12/03
		5,475	15			1.684	0.433	9.230	2.372	21,900	60			6.738	1.731	36.920	9.487	13.2.2 12/03
CP-3	Front end loader	5,475	15			2.762	0.710	15.132	3.888					0.000	0.000	0.000	0.000	13.2.2 12/03
		5,475	15			1.684	0.433	9.230	2.372					0.000	0.000	0.000	0.000	13.2.2 12/03
CP-4	Scraper	4,200	200			0.515	0.232	49.053	22.064	7,300	20			0.897	0.753	4.914	4.125	
CP-5	Bulldozer			724	2	3.120	0.741	17.239	4.092			730	2	3.146	0.747	17.239	4.092	11.9 10/98
	Water Truck	2,738	8			1.648	0.424	9.030	2.320	7,300	20			4.395	1.129	24.080	6.187	13.2.2 12/03
	Total					14.176	3.681	124.046	40.997					26.222	7.199	143.683	39.444	

Table 4

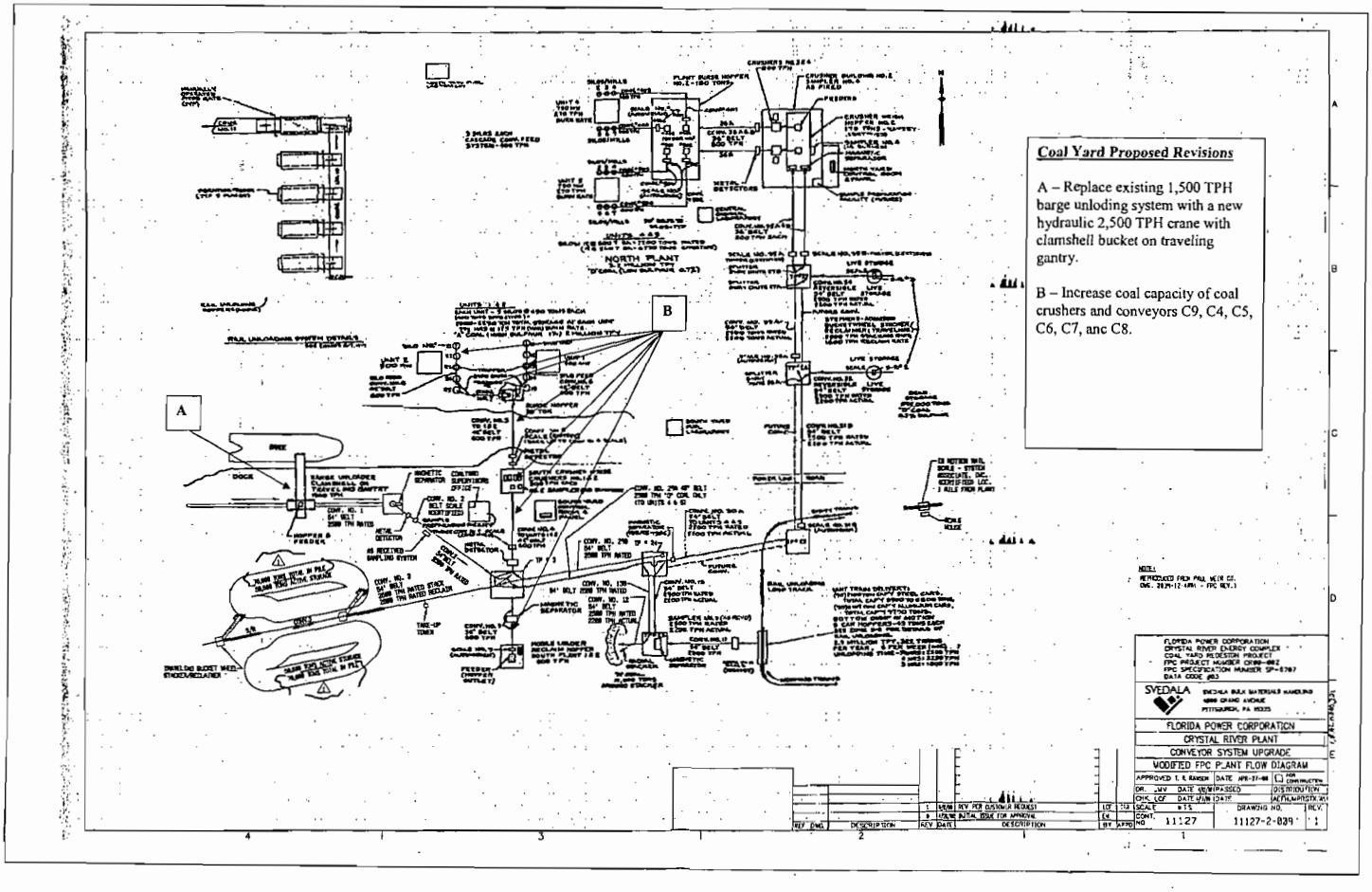
Typical Bituminous Coal Fuel Analysis

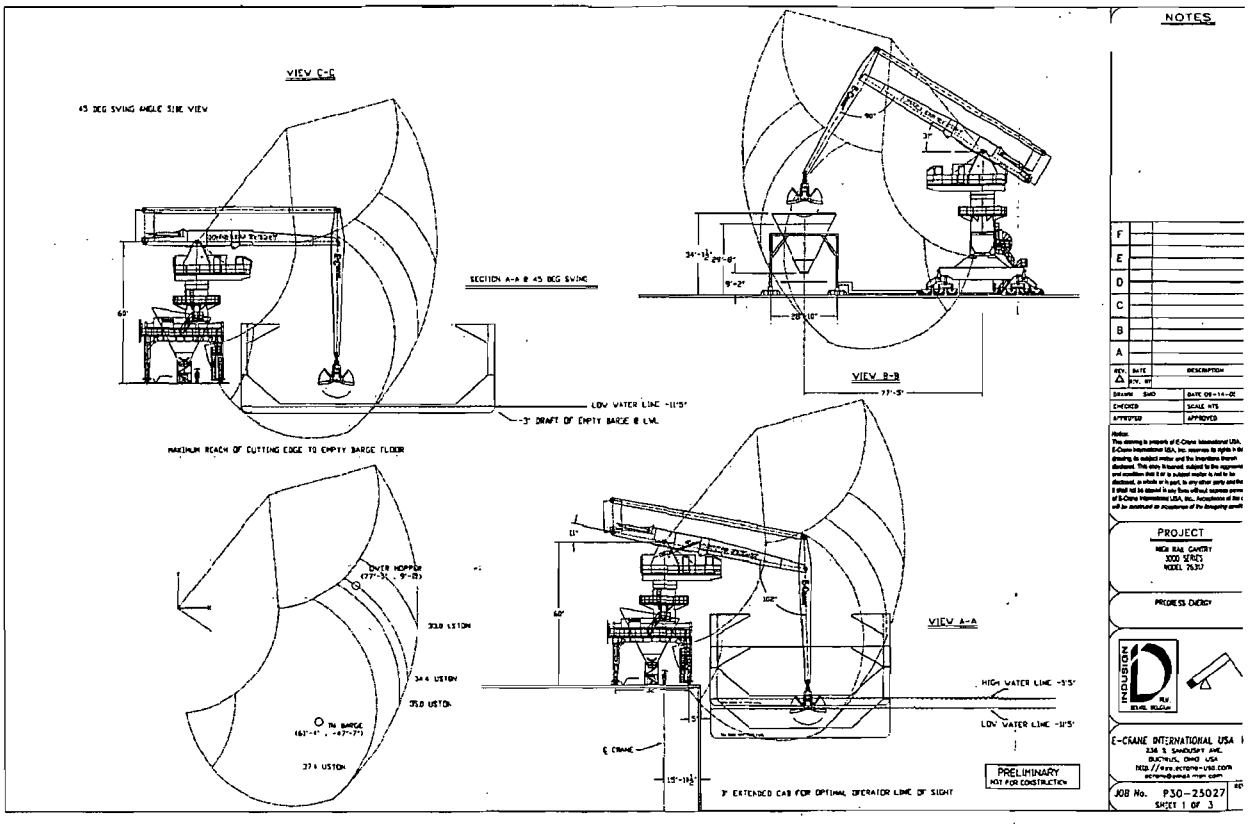
Parameter	Value 1&2	Value 4&5
Moisture content (%)	7.5	7.1
Ash Content (%)	8.9	8.3
Sulfur content (%)	1.2	0.7 (maximum)
Heat content (Btu/lb)	11,300 to 13,200	11,300 to 13,200

Note: The values listed are general or typical values based on information obtained from the fuel suppliers.

FIGURES

Best Available Copy





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DEP Southwest District Office
Air Resources
8407 Laurel Fair Circle

Tampa, FL 33610
UNITED STATES

Attention To: Ms. Mara Nasca
Phone#: 813-744-6100

Sent By: P. Adams
Phone#: 850-921-9505

Rate Estimate: 3.1
Protection: Not Required
Description: PSD-FL-379 and 0170004-014&015

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Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP255
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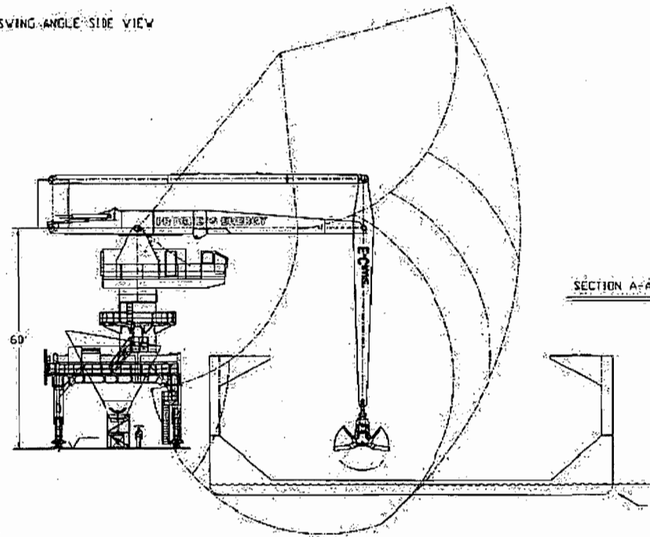
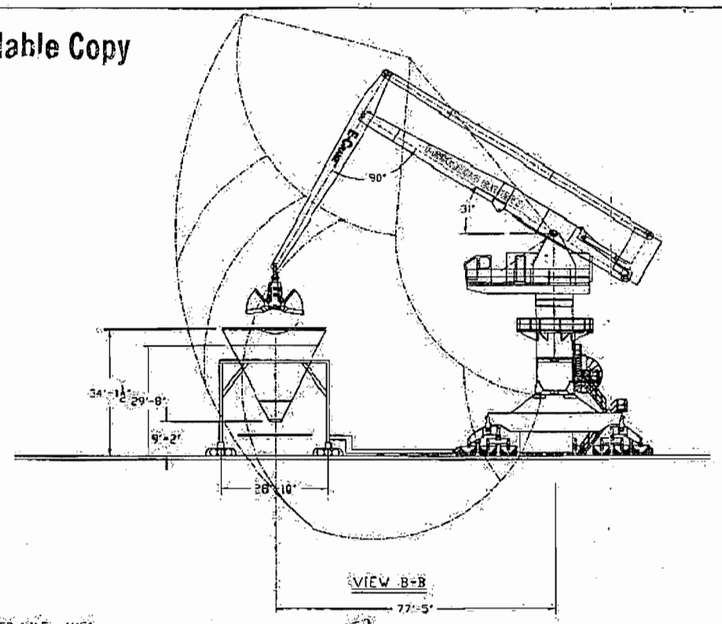
VIEW C-C

45 DEG SWING ANGLE SIDE VIEW



SECTION A-A @ 45 DEG SWING



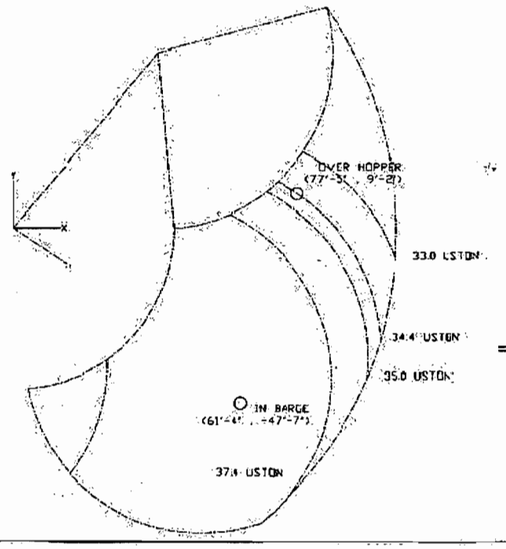
VIEW B-B

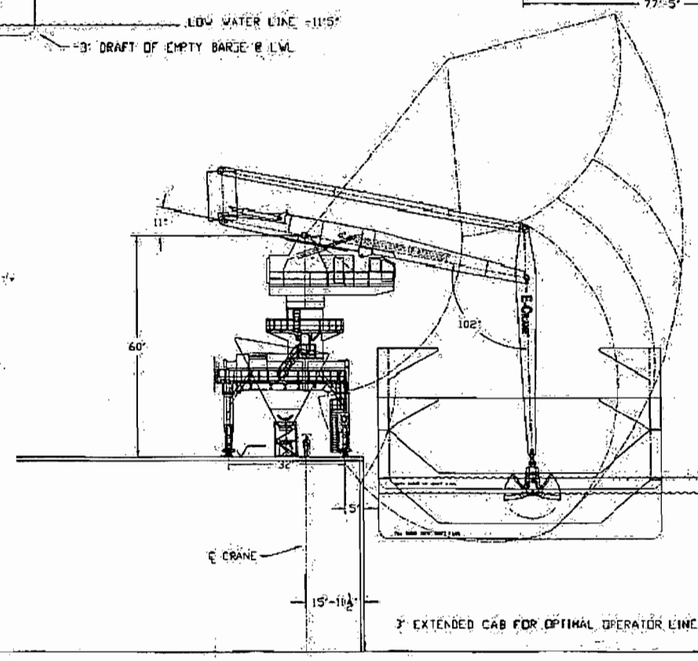
77'-5"

LOW WATER LINE -11'5"

-3' DRAFT OF EMPTY BARGE @ LWL

MAXIMUM REACH OF CUTTING EDGE TO EMPTY BARGE FLOOR





VIEW A-A

3' EXTENDED CAB FOR OPTIMAL OPERATOR LINE OF SIGHT

PRELIMINARY
NOT FOR CONSTRUCTION

NOTES

REV.	DATE	DESCRIPTION
F		
E		
D		
C		
B		
A		
△	REV. BY	

DRAWN SMD	DATE 09-14-05
CHECKED	SCALE NTS
APPROVED	APPROVED

PROJECT

HIGH RAIL GANTRY
3000 SERIES
MODEL 26317

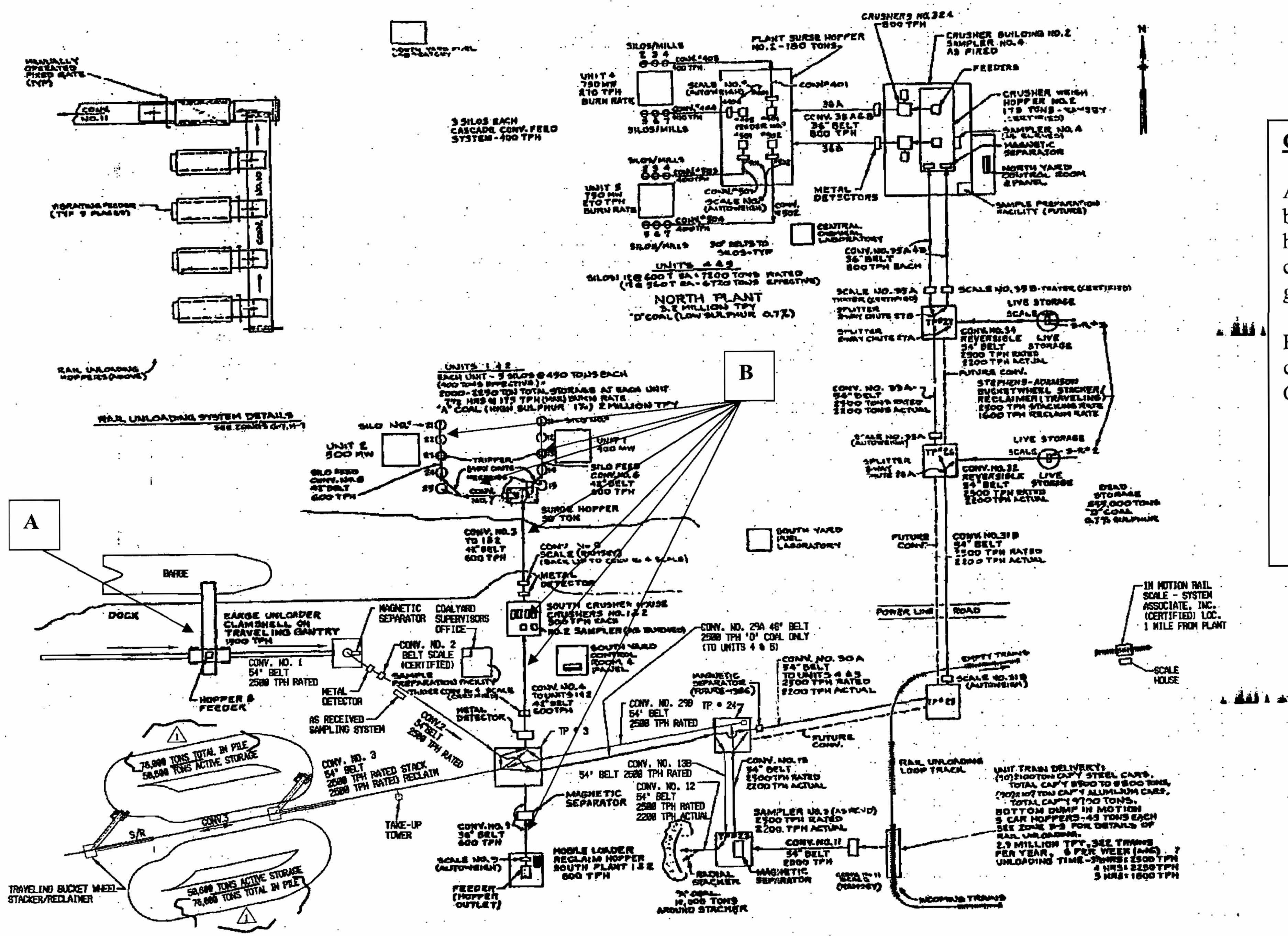
PROGRESS ENERGY

INDUSION N.V. GENK, BELGIUM

E-CRANE INTERNATIONAL USA, I
236 S. SANDUSKY AVE.
BUCYRUS, OHIO, USA
http://www.ecrane-usa.com
ecrane@emoh.msn.com

JOB No. P30-25027 REV

SHEET 1 OF 3



Coal Yard Proposed Revisions

A – Replace existing 1,500 TPH barge unloding system with a new hydraulic 2,500 TPH crane with clamshell bucket on traveling gantry.

B – Increase coal capacity of coal crushers and conveyors C9, C4, C5, C6, C7, anc C8.

NOTE:
REPRODUCED FROM PAUL WEIR CO.
DWG. 2039-12-4001 - FPC REV:1

FLORIDA POWER CORPORATION
CRYSTAL RIVER ENERGY COMPLEX
COAL YARD REDESIGN PROJECT
FPC PROJECT NUMBER CR00-002
FPC SPECIFICATION NUMBER SP-6707
DATA CODE #03

SVEDALA — SVEDALA BULK MATERIALS HANDLING
4800 GRAND AVENUE
PITTSBURGH, PA 15225

FLORIDA POWER CORPORATION
CRYSTAL RIVER PLANT
CONVEYOR SYSTEM UPGRADE
MODIFIED FPC PLANT FLOW DIAGRAM

REV.	DATE	DESCRIPTION	BY	APPD
1	6/8/00	REV. PER CUSTOMER REQUEST	LCF	TRR
0	4/28/00	INITIAL ISSUE FOR APPROVAL	EM	

APPROVED T. R. RAWSON	DATE APR-27-00	FOR CONSTRUCTION
DR. JMV DATE 4/12/00	PASSED	DISTRIBUTION
CHK. LCF DATE 4/17/00	DATE	AEFHJMPRSTX,W1
SCALE N.T.S.	DRAWING NO.	REV.
CONT. NO. 11127	11127-2-009	1

REF. DWG. | DESCRIPTION

4 3 2 1