

## P.E. Certification Statement

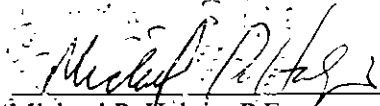
Progress Energy Florida  
Crystal River Energy Center  
Citrus County

DEP File No.: 0170004-009-AV  
Facility ID No.: 0170004

**Project:** Title V Renewal Permit

**I HEREBY CERTIFY** that the engineering features described in the above referenced application and related additional information submittals, if any, and subject to the proposed permit conditions, provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

(Seal)

  
Michael P. Halpin, P.E.  
Registration Number: 31970

9-30-04  
Date

Permitting Authority:

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
North Permitting Section  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114  
Fax: 850/922-6979

# **STATEMENT OF BASIS**

Title V DRAFT Renewal Permit No.: 0170004-009-AV  
Progress Energy Florida  
Crystal River Plant  
Citrus County

The initial Title V air operation permit went final on December 31, 1999, and effective on January 1, 2000. This Title V air operation permit with revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

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). The nuclear unit (Unit 3) is not considered part of this permit, although certain emissions units associated with Unit 3 are included in this permit.

This renewal is issued without changes to the original permit with the exception of the following:

- 1) References to the operator/owner were changed to say "Progress Energy Florida".
- 2) Minor changes were made to the Insignificant and Unregulated Emission Unit lists.
- 3) The renewal includes a CAM Plan.
- 4) The renewal includes a revised Acid Rain Part Application and Phase II NO<sub>x</sub> Compliance Plan. In this regard, a state-only NO<sub>x</sub> emission limit was also included.
- 5) Minor changes were made to Specific Conditions B.14., G.5. and G.6.

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

## 1. Article Addressed to:

Mr. Michael Olive  
Plant Manager  
Progress Energy Florida  
100 Central Avenue  
St. Petersburg, Florida 33701

## 2. Article Number (Copy from service label)

7001 1140 0002 1577 7423

PS Form 3811, July 1999

Domestic Return Receipt

70595-99-11-1799

**COMPLETE THIS SECTION ON DELIVERY**


A. Received by (Please Print Clearly)

Ron Johnson

B. Date of Delivery

10-7-04

C. Signature

☒ Agent☐ Addressee

D. Is delivery address different from item 1?

☒ Yes

If YES, enter delivery address below:

☐ No

~~157~~ 15760 W. Bowerline  
St.  
Crystal River, FL 34428

## 3. Service Type

☒ Certified Mail☐ Express Mail☐ Registered☐ Return Receipt for Merchandise☐ Insured Mail☐ C.O.D.

## 4. Restricted Delivery? (Extra Fee)

☐ Yes

U.S. Postal Service

**CERTIFIED MAIL RECEIPT**

(Domestic Mail Only; No Insurance Coverage Provided)

**OFFICIAL USE**

Mr. Michael Olive, Plant Manager

Postage

\$

Certified Fee

Return Receipt Fee  
(Endorsement Required)Restricted Delivery Fee  
(Endorsement Required)

Total Postage &amp; Fees

\$

Postmark  
Here**Sent To**

Mr. Michael Olive, Plant Manager

Street, Apt. No.;

or PO Box No. 100 Central Avenue

City, State, ZIP+4

St. Petersburg, Florida 33701

PS Form 3800, January 2001

See Reverse for Instructions



Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

September 30, 2004

Michael Olive  
Plant Manager  
Progress Energy Florida  
100 Central Avenue  
St. Petersburg, Florida 33701

Re: Title V Air Operation Permit No. 0170004-009-AV  
Progress Energy – Crystal River Energy Center  
DRAFT Title V Permit Renewal

Dear Mr. Olive:

On June 30, 2004, you submitted an application for a Title V air permit to operate the Crystal River Energy Center which is located at 15760 West Power Line St., Crystal River, Citrus County. Enclosed are the following documents: "Statement of Basis", "DRAFT Permit", "Written Notice of Intent to Issue Title V Air Operation Permit", and "Public Notice of Intent to Issue Title V Air Operation Permit".

The "Statement of Basis" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a DRAFT Permit. The proposed "DRAFT Permit" includes specific conditions that regulate the emissions units at this facility. The "Written Notice of Intent to Issue Title V Air Operation Permit" provides important information regarding: the Permitting Authority's intent to issue a Title V air operation permit (DRAFT Permit); the requirements for publishing a Public Notice of the Permitting Authority's intent to issue the DRAFT Permit; the procedures for submitting comments on the DRAFT Permit; the requirements for requesting a public meeting; the requirements for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Title V Air Operation Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Michael P. Halpin, at 850/921-9519.

Sincerely,

Trina Vielhauer, Chief  
Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

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**WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT**

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*In the Matter of an  
Application for Title V Air Operation Permit by:*

Michael Olive, Plant Manager  
Progress Energy Florida  
100 Central Avenue  
St. Petersburg, FL 33701

DRAFT Air Permit No. 0170004-009-AV]  
Crystal River Energy Center  
Title V Permit Renewal  
Citrus County, Florida

**Facility Location:** The applicant requests a Title V air operation permit renewal to continue operation of the Crystal River Energy Center, which is located at 15760 West Power Line St., Crystal River, in Citrus County, Florida.

**Project:** On June 30, 2004, the applicant applied to the Permitting Authority for a Permit renewal. Details of the project are provided in the application and the enclosed "Statement of Basis".

**Permitting Authority:** Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-213 and 62-214, Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to operate the facility. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: 111 S. Magnolia Dr., Tallahassee, FL 32399. The Permitting Authority's mailing address is: 2600 Blairstone Rd., Mailstop #5505, Tallahassee, FL 32399. The Permitting Authority's telephone number is 850/488-0114 and facsimile 850/922-6979.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit and file electronic comments by visiting the following website: <http://www.dep.state.fl.us/air/eproducts/ards/>. A copy of the complete project file is also available at the DEP Southwest District Office at 3804 Coconut Palm Drive, Tampa, FL 33619 (Telephone: 813/744-6100).

**Notice of Intent to Issue Air Permit:** The Permitting Authority gives notice of its intent to issue a permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Title V Air Operation Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the DRAFT Permit for a

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## WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

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period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5 pm), on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://tlhora6.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Title V Air Operation Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Title V Air Operation Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Title V Air Operation Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have

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WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

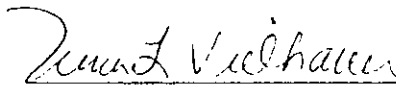
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the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.

**Objections:** Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

Executed in Tallahassee, Florida.



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Trina Vielhauer, Chief  
Bureau of Air Regulation

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Statement of Basis, and the Draft Permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on

10/1/04 to the persons listed below.

Michael Olive\*  
Dave Meyer, PGN  
Scott Osbourn, Golder  
Southwest District Office  
EPA Region 4  
National Park Service

Clerk Stamp

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

Barbara J. Friday 10/1/04  
(Clerk) (Date)



**PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT**

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**DRAFT Title V Air Operation Permit No. 0170004-009-AV**

**Progress Energy Florida – Crystal River Energy Center**

**Citrus County**

**Applicant:** The applicant for this project is Progress Energy Florida, 100 Central Avenue, St. Petersburg, Florida 33701. The applicant's responsible official is Michael Olive, Plant Manager.

**Facility Location:** The applicant operates a power plant, which is located at 15760 West Power Line St., Crystal River in Citrus County, Florida.

**Project:** The applicant submitted an application for a Title V Air Operation Permit. This permit will be a renewal of the air operating permit for this facility.

**Permitting Authority:** Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to operate the facility. The Florida Department of Environmental Protection Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: 111 S. Magnolia Avenue, Tallahassee, Florida 32399. The Permitting Authority's mailing address is: 2600 Blairstone Rd., Mailstop #5505, Tallahassee, Florida 32399. The Permitting Authority's telephone number is 850/488-0114 and facsimile 850/922-6979.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit and file electronic comments by visiting the following website: <http://www.dep.state.fl.us/air/eproducts/ards/>. A copy of the complete project file is also available at the Southwest District Office located at 3804 Coconut Palm Drive, Tampa, Florida 33619 (Telephone: 813/744-6100).

**Notice of Intent to Issue A Permit:** The Permitting Authority gives notice of its intent to issue a permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked and all e-mail or facsimile comments must be received by the close of business (5 pm) on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://tlhora6.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition

## PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of intent. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available for this proceeding.

**Objections:** In addition to the above right to petition, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

Progress Energy Florida  
Crystal River Plant  
**Facility ID No.:** 0170004  
Citrus County

Title V Air Operation Permit Renewal  
**DRAFT Permit No.:** 0170004-009-AV

Permitting Authority:  
State of Florida  
Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
Title V Section

Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344  
Fax: 850/922-6979

Compliance Authority:  
Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8218  
Telephone: 813/744-6100  
Fax: 813/744-6084

Title V Air Operation Permit Renewal  
DRAFT Permit No.: 0170004-009-AV

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**Permittee:**  
Progress Energy Florida  
One Power Plaza  
263 13<sup>th</sup> Avenue South, BB1A  
St. Petersburg, FL 33701-5511

**DRAFT Permit No.:** 0170004-009-AV  
**Facility ID No.:** 0170004  
**SIC Nos.:** 49, 4911  
**Project:** Title V Air Operation Permit Renewal

This facility is located Power Line Road, West of U.S. Hwy. 19, Crystal River, Citrus County; UTM Coordinates: Zone 17, 334.3 km East and 3204.5 km North; Latitude: 28° 57' 34" North and Longitude: 82° 42' 1" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit

**Referenced attachments made a part of this permit:**

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix CAM

Appendix TV-4, Title V Conditions (version dated 02/12/02)

Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)

Appendix P, Sensitive Paper Sampling Locations and Apparatus

Table 297.310-1, Calibration Schedule (version dated 10/07/96)

Figure 1 - Summary Report-Gaseous And Opacity Excess Emission And Monitoring System Performance Report (version dated 7/96)

Phase II Acid Rain Application/Compliance Plans received 12/22/95 and 06/30/2004

Phase I Acid Rain permit dated 3/27/97

Alternate Sampling Procedure: ASP Number 97-B-01 and ASP Number 00-E-01

Order Granting Petition for Reduced Frequency of Particulate Testing, OGC Case No. 86-1576, Order dated December 12, 1986 (Emissions Unit 001)

Best Management Plan, KBN, November 1990

Figure A, Ambient Air Monitoring Locations, Crystal River, Florida

**Effective Date:** January 1, 2005

**Renewal Application Due Date:** July 5, 2009

**Expiration Date:** December 31, 2009

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Michael G. Cooke, Director  
Division of Air Resource  
Management

## Section I. Facility Information.

### Subsection A. 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). The nuclear unit (Unit 3) is not considered part of this permit, although certain emissions units associated with Unit 3 are included in this permit.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996 and renewal application received June 30, 2004, this facility is a major source of hazardous air pollutants (HAPs).

### Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

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	Two three 3500 kW diesel generators associated with Unit 3

*Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.*

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Documents on file with USEPA

Risk Management Plan submitted to the RMP Reporting Center on 06/21/99 (received date).

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996

BACT Determination dated 8/29/90 (Cooling Tower Drift Emission Rate)

BACT Determinations ordered 2/5/79 (proposed 1/26/79) and 8/16/79 (Fly Ash Transfer)

Revision to Permit Application received April 17, 1998

Letter received November 9, 1998, from Mr. Scott Osbourn.

Letter received August 2, 1999, from Mr. J. Michael Kennedy

Title V Permit Revision Application received September 5, 2000

Renewal Title V Permit Application received June 30, 2004

Letter received September 22, 2004 from Mr. Mike Olive

## Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS is a part of this permit.

{Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not Federally Enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.  
The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.

Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rule 62-296.320(4)(b)1. & 4, F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAAA.

c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs  
Division of Emergency Management  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399-2100  
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center  
Post Office Box 1515  
Lanham-Seabrook, MD 20703-1515  
Telephone: 301/429-5018



Any required reports to be sent to the National Response Center, should be sent to:

National Response Center  
EPA Office of Solid Waste and Emergency Response  
USEPA (5305 W)  
401 M Street, SW  
Washington, D.C. 20460  
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier  
Department of Community Affairs  
State Emergency Response Commission  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.]

**5. Unregulated Emissions Units and/or Activities.** Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.

[Rule 62-213.440(1), F.A.C.]

**6. Insignificant Emissions Units and/or Activities.** Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

**7. Not Federally Enforceable. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. The owner or operator shall:

- a. Tightly cover or close all VOC or OS containers when they are not in use.
- b. Tightly cover all open tanks which contain VOC or OS when they are not in use.
- c. Maintain all pipes, valves, fittings, etc., which handle VOC or OS in good operating condition.
- d. Immediately confine and clean up VOC or OS spills and make sure wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1)(a), F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

**8. Not Federally Enforceable.** No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility may include, as needed:

- a. Maintenance of paved areas as needed.
- b. Regular mowing of grass and care of vegetation.
- c. Limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

**9.** When appropriate any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which defines day one.

[Rule 62-213.440, F.A.C.]

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office:

Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, FL 33619-8218  
Telephone: 813/744-6100  
Fax: 813/744-6458

Any reports, data, notifications, certifications and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Air and EPRCA Enforcement Branch  
Air Enforcement Section  
61 Forsyth Street  
Atlanta, GA 30303-8960  
Phone: 404/562-9155  
Fax: 404/562-9163 or 404/562-9164

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year using DEP Form number 62-213.900(7), F.A.C. [Rule 62-213.440(3), F.A.C.]  
{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.  
[Rule 62-213.420(4), F.A.C.]

### Section III. Emissions Unit(s) and Conditions.

#### Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
001	Fossil Fuel Steam Generator, Unit 1: a tangentially fired unit, rated at 440.5 MW, 3750 MMBtu/hr, burning bituminous coal; or a bituminous coal and bituminous coal briquette mixture. Distillate fuel oil may be burned as a startup fuel. Emissions are exhausted through a 499 ft. stack. This unit may also burn oily flyash.
002	Fossil Fuel Steam Generator, Unit 2: a tangentially fired unit, rated at 523.8 MW, 4795 MMBtu/hr, burning bituminous coal; or a bituminous coal and bituminous coal briquette mixture. Distillate fuel oil may be burned as a startup fuel. Emissions are exhausted through a 502 ft. stack. This unit may also burn oily flyash.

Fossil Fuel Steam Generators, Units 1 and 2, are pulverized coal dry bottom boilers, tangentially-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Buell Manufacturing Company, Inc.

#### Compliance Assurance Monitoring (CAM) Requirements

These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

{Permitting Notes: These emissions units are regulated under Acid Rain, Phase I and II and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, and Power Plant Siting Certification PA 77-09 conditions. Fossil fuel fired steam generator Unit 1 began commercial operation in 1966. Fossil fuel fired steam generator Unit 2 began commercial operation in 1969.}

#### The following specific conditions apply to the emissions unit(s) listed above:

{Permitting note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

#### Essential Potential to Emit (PTE) Parameters

**A.1. Permitted Capacity.** The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
001	3750	Bituminous Coal; or Bituminous Coal and Bituminous Coal Briquette Mixture
002	4795	Bituminous Coal; or Bituminous Coal and Bituminous Coal Briquette Mixture

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in

determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **I.11**.  
[Rule 62-297.310(2), F.A.C.]

**A.3. Methods of Operation. Fuels.** The only fuels allowed to be burned by this permit are: bituminous coal; a bituminous coal and bituminous coal briquette mixture, and distillate fuel oil for startup. These emissions units may also burn used oil in accordance with other conditions of this permit (see **Subsection K**). Emissions units 001 and 002 may also burn oily flyash in accordance with specific condition **A.16** of this permit.  
[Rule 62-213.410, F.A.C.; 0170004-002-AO; 0170004-005-AO; and, 0170004-006-AC]

### **Emission Limitations and Standards**

**A.4.a. Visible Emissions - Emissions Unit 001.** Visible emissions shall not exceed 40 percent opacity, six minute average. Emissions units governed by this visible emissions standard shall compliance test for particulate matter emissions annually.  
[Rule 62-296.405(1)(a), F.A.C.; and OGC Case No. 86-1576, Order dated December 12, 1986.]

**A.4.b. Visible Emissions - Emissions Unit 002.** Visible emissions shall not exceed 20 percent opacity, six minute average, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.  
[Rule 62-296.405(1)(a), F.A.C.]

**A.5. Visible Emissions - Soot Blowing and Load Change.** Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3-hours in any 24 hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), six minute average, and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of the excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition, for boiler cleaning and load changes, at units which have installed and are operating continuous opacity monitors.

[Rule 62-210.700(3), F.A.C., Note: these units have operational continuous opacity monitors.]

**A.6. Particulate Matter.** Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.  
[Rule 62-296.405(1)(b), F.A.C.]

**A.7. Particulate Matter - Soot Blowing and Load Change.** Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.  
[Rule 62-210.700(3), F.A.C.]

{Permitting note: The averaging time for the particulate matter standard corresponds to the cumulative sampling time of the specified test method.}

**A.8. Sulfur Dioxide.**

(a) When burning coal, sulfur dioxide emissions shall not exceed 2.1 pounds per million Btu heat input, 24-hour average.

(b) The maximum percent sulfur content of the coal/briquette mixture shall not exceed 1.05%, by weight, averaged on an annual basis.

[Rule 62-213.440, F.A.C.; PPSC PA 77-09; 0170004-003-AC; and, 0170004-006-AC]

**Test Methods and Procedures**

**A.9. Particulate Matter.** The test methods for particulate emissions shall be EPA Methods 17 or 5 incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

**A.10. Visible Emissions.** The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. [Rules 62-296.405(1)(e)1. and 62-297.401, F.A.C.]

**A.11. Sulfur Dioxide.** The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee may demonstrate compliance using fuel sampling and analysis.** If the permittee elects to discontinue fuel sampling and analysis, it shall perform a stack test for sulfur dioxide at the time of the next particulate matter test, and annually thereafter until fuel sampling and analysis is resumed. [Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.]

**A.12. Sulfur Dioxide.** The owner or operator may demonstrate compliance with the sulfur dioxide limitation using fuel sampling and analysis. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **A.11** and **A.13**. [Rule 62-296.405(1)(f)1.b., F.A.C.]

**A.13. Sulfur Dioxide - Fuel Sampling.** The following fuel sampling and analysis program shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard:

- Determine and record the as-fired fuel sulfur content, percent by weight, for coal using appropriate ASTM methods such as, ASTM D2013-72, ASTM D3177-75, and ASTM D4239-85, or latest ASTM edition methods, to analyze a representative sample of coal following each fuel delivery.
- Record daily the amount of coal fired, the density of each fuel, the Btu value, and the percent sulfur content by weight of each fuel.
- Utilize the information in a. and b., above, to calculate the SO<sub>2</sub> emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

### **Monitoring of Operations**

**A.14. Annual Tests Required - PM and VE.** Except as provided in specific conditions I.6 and I.7 of this permit, emission testing for particulate matter emissions and visible emissions shall be performed annually.  
[Rules 62-4.070(3), 62-213.440, and 62-297.310(7), F.A.C.]

**A.15. Excess Emissions - Report.** Submit to the Southwest District Air Section a written report of emissions in excess of emission limiting standards as set forth in this permit, for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

### **Oily Flyash**

**A.16. Oily Flyash.** These emissions units may burn oily flyash ("flyash") from Bartow Unit 1 in accordance with the following:

- a. Only flyash from Bartow Unit 1 may be burned in these emissions units. Once the accumulated backlog of Bartow Unit 1 flyash (estimated at approximately 13,000 tons) is burned, only the additional flyash generated at Bartow Unit 1 shall be burned in these emissions units.
- b. The maximum flyash blend rate shall not exceed 2% of the total boiler feed on a weight basis.
- c. The owner or operator shall make and maintain the following records for each day that flyash is burned in the boiler:
  1. Date and Unit number;
  2. Time period of flyash burning and start and end times;
  3. Total quantity of flyash burned in tons per day;
  4. Maximum flyash blend rate during period of flyash burn (percent flyash in total emissions unit fuel feed on a weight basis).

[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, 0170004-005-AO]

### **Common Conditions**

**A.17.** These emissions units are also subject to conditions I.1 through I.15 contained in **Subsection I. Common Conditions.**

**A.18.** These emissions units are also subject to condition K.1 contained in **Subsection K. Used Oil Common Condition.**

### **Record Keeping and Reporting Requirements:**

**A.19. COMS for Periodic Monitoring:**

- a. Periodic monitoring for opacity shall be COMS, which are maintained and operated in conformance with 40 CFR Part 75.
- b. Periodic monitoring for particulate matter shall be COMS. For any calendar quarter in which more than five percent of the COMS readings show 20% or greater opacity for Units 2, 4, and 5 and 30% or greater opacity for Unit 1 (excluding startup, shutdown, and malfunction periods), a steady-state particulate matter stack test shall be performed within the following calendar quarter. Due to the allowed opacity level of 60% for sootblowing and load changing periods for Units 1 and 2, periods of sootblowing and load changing shall also be excluded for those units. The stack test shall comply with all of the testing and reporting requirements contained in the preceding specific conditions and, where practicable, shall be performed while operating at conditions representative of those showing greater than 20% opacity (30% for Unit 1). Units are not required to be brought on-line solely for the purpose of performing this special test. If the unit does not operate in the following quarter, the special test may be postponed until the unit is brought back on-line. In such cases, the special test shall be performed within 30 days.  
[Rule 62-213.440, F.A.C.]

**Subsection B. This section addresses the following emissions unit.**

E.U. ID No.	Brief Description
004	Fossil Fuel Steam Generator, Unit 4, a dry bottom wall-fired unit, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, a bituminous coal and bituminous coal briquette mixture, and used oil, with number 2 fuel oil as a startup fuel, and natural gas as a startup and low-load flame stabilization fuel, with emissions exhausted through a 600 ft. stack.
003	Fossil Fuel Steam Generator, Unit 5, a dry bottom wall-fired unit, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, a bituminous coal and bituminous coal briquette mixture, and used oil, with number 2 fuel oil as a startup fuel, and natural gas as a startup and low-load flame stabilization fuel, with emissions exhausted through a 600 ft. stack.

Fossil Fuel Steam Generators, Units 4 and 5, are pulverized coal dry bottom boilers, wall-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Combustion Engineering.

**Compliance Assurance Monitoring (CAM) Requirements**

These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

{Permitting Notes: These emissions units are regulated under Acid Rain, Phase I and II and Rule 62-210.300, F.A.C., Permits Required; 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971; and, Power Plant Siting Certification PA 77-09 conditions. Fossil fuel fired steam generator Unit 4 began commercial operation in 1982. Fossil fuel fired steam generator Unit 5 began commercial operation in 1984.}

**The following specific conditions apply to the emissions unit(s) listed above:**

{Permitting note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

**Essential Potential to Emit (PTE) Parameters**

**B.1. Permitted Capacity.** The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
004	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal Briquette Mixture
003	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal Briquette Mixture

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

\* {Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what

percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

**B.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **I.11.**  
[Rule 62-297.310(2), F.A.C.]

**B.3. Methods of Operation. Fuels.** The only fuel allowed to be burned is bituminous coal or bituminous coal and bituminous coal briquette mixture with the exception that number 2 fuel oil may be used as an ignitor fuel, and natural gas may be used as a startup and low-load flame stabilization fuel. Fuel oil shall not contain more than 0.73% sulfur by weight. These emissions units may also burn used oil in accordance with other conditions of this permit (see **Subsection K**).  
[Rule 62-213.410, F.A.C.; and, PPSC PA 77-09 and modified conditions]

#### **Emission Limitations and Standards**

**B.4. Pursuant to 40 CFR 60.42 Standard For Particulate Matter.**

- (a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:
- (1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.
  - (2) Exhibit greater than 20 percent opacity, six minute average, except for one six-minute period per hour of not more than 27 percent opacity.
- [40 CFR 60.42(a)(1) & (2)]

**B.5.a. Standard For Sulfur Dioxide.**

- (a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
- (1) 340 nanograms per joule heat input (0.80 lb per million Btu), 24-hour average, derived from liquid fossil fuel.
  - (2) 520 nanograms per joule heat input (1.2 lb per million Btu), 24-hour average, derived from solid fossil fuel.
- (b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO_2} = [y(340) + z(520)]/(y+z)$$

where:

$PS_{SO_2}$  is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,

y is the percentage of total heat input derived from liquid fossil fuel, and

z is the percentage of total heat input derived from solid fossil fuel.

- (c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.  
[40 CFR 60.43(a), (b) and (c); and, PPSC PA 77-09]

**B.5.b. Standard For Sulfur Dioxide.** The maximum percent sulfur content of the coal/briquette mixture shall not exceed 0.68%, by weight, averaged on an annual basis. {See specific conditions **B.10.** and **B.11.**}  
[Rule 62-213.440, F.A.C.; and, 0170004-006-AC]

**B.6. Pursuant to 40 CFR 60.44 Standard For Nitrogen Oxides.**



(a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of:

(1) 86 nanograms per joule heat input (0.20 lb per million Btu), 30-day rolling average, derived from gaseous fossil fuel.

(2) 129 nanograms per joule heat input (0.30 lb per million Btu), 30-day rolling average, derived from liquid fossil fuel.

(3) 300 nanograms per joule heat input (0.70 lb per million Btu), 30-day rolling average, derived from solid fossil fuel.

(b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NO_x} = \frac{x(86)+y(130)+z(300)}{x+y+z}$$

where:

PS<sub>NO<sub>x</sub></sub> = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels fired;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel.

[40 CFR 60.44(a)(2) and (3), and (b); and, PPSC PA 77-09]

**B.7. Unit Specific State Only Limit For Nitrogen Oxides.** A unit specific, state-only average annual NO<sub>x</sub> emission limit of 0.50 lb/mmBtu applies. Compliance shall be demonstrated within the Annual Operating Report (AOR). [Applicant Request]

### **Test Methods and Procedures**

#### **B.8. Pursuant to 40 CFR 60.46 Test methods and Procedures.**

(a) When conducting emissions tests, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d).

(b) The owner or operator shall determine compliance with the particulate matter, SO<sub>2</sub>, and NO<sub>x</sub> standards in 40 CFR 60.42, 60.43, and 60.44 as follows:

(1) The emission rate (E) of particulate matter, SO<sub>2</sub>, or NO<sub>x</sub> shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \%O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O<sub>2</sub> = oxygen concentration, percent dry basis.

F<sub>d</sub> = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particulate matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O<sub>2</sub> concentration (%O<sub>2</sub>). The O<sub>2</sub> sample shall be obtained simultaneously with, and at the

same traverse points as, the particulate sample. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of all the individual O<sub>2</sub> sample concentrations at each traverse point.

(iii) If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> traverse points.

(3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

(4) Method 6 shall be used to determine the SO<sub>2</sub> concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O<sub>2</sub> concentration (%O<sub>2</sub>). The O<sub>2</sub> sample shall be taken simultaneously with, and at the same point as, the SO<sub>2</sub> sample. The SO<sub>2</sub> emission rate shall be computed for each pair of SO<sub>2</sub> and O<sub>2</sub> samples. The SO<sub>2</sub> emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 shall be used to determine the NO<sub>x</sub> concentration.

(i) The sampling site and location shall be the same as for the SO<sub>2</sub> sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO<sub>x</sub> sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O<sub>2</sub> concentration (%O<sub>2</sub>). The sample shall be taken simultaneously with, and at the same point as, the NO<sub>x</sub> sample.

(iii) The NO<sub>x</sub> emission rate shall be computed for each pair of NO<sub>x</sub> and O<sub>2</sub> samples. The NO<sub>x</sub> emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

(c) When combinations of fossil fuels are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.43(b) and 60.44(b)) shall determine the percentage (x, y, or z) of the total heat input derived from each type of fuel as follows:

(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

(2) ASTM Methods D 2015-77 (solid fuels), D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.

(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

(d) The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO<sub>2</sub> and NO<sub>x</sub> may be determined by using the F<sub>c</sub> factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \%CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

%CO<sub>2</sub> = carbon dioxide concentration, percent dry basis.

F<sub>c</sub> = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F<sub>c</sub> factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O<sub>2</sub> and CO<sub>2</sub> concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F<sub>o</sub> (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F<sub>o</sub> value, as determined from the average values of F<sub>d</sub> and F<sub>c</sub> in Method 19, i.e., F<sub>oa</sub> = 0.209 (F<sub>da</sub> / F<sub>ca</sub>), then the following procedure shall be followed:

(A) When  $F_o$  is less than  $0.97 F_{oa}$ , then E shall be increased by that proportion under  $0.97 F_{oa}$ , e.g., if  $F_o$  is  $0.95 F_{oa}$ , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When  $F_o$  is less than  $0.97 F_{oa}$  and when the average difference ( $\bar{d}$ ) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under  $0.97 F_{oa}$ , e.g., if  $F_o$  is  $0.95 F_{oa}$ , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When  $F_o$  is greater than  $1.03 F_{oa}$  and when  $\bar{d}$  is positive, then E shall be decreased by that proportion over  $1.03 F_{oa}$ , e.g., if  $F_o$  is  $1.05 F_{oa}$ , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of  $160^\circ\text{C}$  ( $320^\circ\text{F}$ ). The procedures of sections 2.1 and 2.3 of Method 5B may be used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and  $\text{SO}_2$  may be determined simultaneously with the Method 5 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

(ii) All applicable procedures in Method 8 for the determination of  $\text{SO}_2$  (including moisture) are used:

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the  $\text{SO}_2$  emission rate, under the conditions in 40 CFR 60.46(d)(1).

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the  $\text{O}_2$  concentration ( $\%\text{O}_2$ ) for the emission rate correction factor.

(6) For Method 3, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(a), (b), (c) & (d)]

**B.9. Annual RATA Tests May Substitute for Annual  $\text{NO}_x$  and  $\text{SO}_2$  Tests.** Annual RATA tests performed for nitrogen oxides and sulfur dioxide may be substituted for the annual compliance tests for these pollutants. To substitute for the annual compliance tests, the owner or operator must notify the Department of the RATA tests and the results must be submitted as the compliance tests, in accordance with the requirements of specific conditions I.6.(a)9. and I.15 of this permit. The requirements of specific conditions I.9 and I.12.(a)1. shall not apply to these tests. The test runs shall be consecutively completed in a manner that fulfills the test length requirements of the EPA test methods.

[Request of applicant, February 11, 1998]

**B.10.** The permittee shall demonstrate compliance with the sulfur dioxide limit in specific condition **B.5.b.** by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **B.5.b.** and **B.11.**

[Rule 62-213.440, F.A.C.; and, 0170004-006-AC]

**B.11. Sulfur Dioxide - Fuel Sampling.** The following fuel sampling and analysis program shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the fuel sulfur standard:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for coal using appropriate ASTM methods such as, ASTM D2013-72, ASTM D3177-75, and ASTM D4239-85, or latest ASTM edition methods, to analyze a representative sample of coal following each fuel delivery.

b. Record daily the amount of coal fired, the density of each fuel, the Btu value, and the percent sulfur content by weight of each fuel.

c. Utilize the information in a. and b., above, to calculate the  $\text{SO}_2$  emission rate to ensure compliance at all times.

[Rule 62-213.440, F.A.C.; and, 0170004-006-AC]

### Monitoring of Operations

**B.12. Maintain Daily Log.** The owner or operator shall maintain a daily log of the amounts and types of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values to facilitate calculations of emissions.  
[PPSC PA 77-09]

**B.13. Annual Tests Required - PM, VE, SO<sub>2</sub> and NO<sub>x</sub>.** Except as provided in specific conditions **I.6** and **I.7** of this permit, emission testing for particulate matter emissions, visible emissions, sulfur dioxide and nitrogen oxides shall be performed annually.  
[Rules 62-4.070(3), 62-213.440, and 62-297.310(7), F.A.C.]

**B.14. Pursuant to 40 CFR 60.45 Emission Monitoring.**

CMS for Opacity, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> are Required.

(a) Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and carbon dioxide except as provided in 40 CFR 60.45(b).

(c) For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

(1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows: per the applicable requirements in 40 CFR Parts 60 and 75.

{In parts per million}

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas.....	{1}	500
Liquid.....	1,000	500
Solid.....	1,500	1000
Combinations.....	$1,000y + 1,500z$	$500(x+y) + 1,000z$

{1} Not applicable.

where:

~~x = the fraction of total heat input derived from gaseous fossil fuel, and~~

~~y = the fraction of total heat input derived from liquid fossil fuel, and~~

~~z = the fraction of total heat input derived from solid fossil fuel.~~

∴ (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.

(e) For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9\text{-percent } O_2)]$$

where:

E, C, F, and %  $O_2$  are determined under 40 CFR 60.45(f).

(2) When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$$E = CF_c [100/\text{percent } CO_2]$$

where:

E, C,  $F_c$  and % $CO_2$  are determined under 40 CFR 60.45(f).

(f) The values used in the equations under 40 CFR 60.45(e) (1) and (2) are derived as follows:

(1) E = pollutant emissions, ng/J (lb/million Btu).

(2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by  $4.15 \times 10^{-4}$  M ng/dscm per ppm ( $2.59 \times 10^{-9}$  M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.

(3) %  $O_2$ , % $CO_2$  = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).

(4) F,  $F_c$  = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted ( $F_c$ ), respectively. Values of F and  $F_c$  are given as follows:

(ii) For subbituminous and bituminous coal as classified according to ASTM D388-77 (incorporated by reference-see 40 CFR 60.17),  $F = 2.637 \times 10^{-7}$  dscm/J (9,820 dscf/million Btu) and  $F_c = 0.486 \times 10^{-7}$  scm  $CO_2$  /J (1,810 scf  $CO_2$  /million Btu).

(iii) For liquid fossil fuels including crude, residual, and distillate oils,  $F = 2.476 \times 10^{-7}$  dscm/J (9,220 dscf/million Btu) and  $F_c = 0.384 \times 10^{-7}$  scm  $CO_2$  /J (1,430 scf  $CO_2$  /million Btu).

(iv) For gaseous fossil fuels,  $F = 2.347 \times 10^{-7}$  dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels,  $F_c = 0.279 \times 10^{-7}$  scm  $CO_2$  /J (1,040 scf  $CO_2$  /million Btu) for natural gas,  $0.322 \times 10^{-7}$  scm  $CO_2$  /J (1,200 scf  $CO_2$  /million Btu) for propane, and  $0.338 \times 10^{-7}$  scm  $CO_2$  /J (1,260 scf  $CO_2$  /million Btu) for butane.

(5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or  $F_c$  factor (scm  $CO_2$  /J, or scf  $CO_2$  /million Btu) on either basis in lieu of the F or  $F_c$  factors specified in 40 CFR 60.45(f)(4):

$$F = 10^{-6} \frac{[227.2 (\text{pct. II}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + 8.7 (\text{pct. N}) - 28.7 (\text{pct. O})]}{GCV}$$

$$F_c = \frac{2.0 \times 10^{-5} (\text{pct. C})}{GCV}$$

(SI units)

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{GCV}$$

(English units)

$$F_c = \frac{20.0(\%C)}{GCV}$$

(SI units)

$$F_c = \frac{321 \times 10^3 (\%C)}{GCV}$$

(English units)

(i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-74 or D3176 (solid fuels) or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)

(ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable. (These two methods are incorporated by reference-see 40 CFR 60.17.)

(6) For affected facilities firing combinations of fossil fuels, the F or  $F_c$  factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^n X_i (F_c)_i$$

where:

$X_i$  = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, etc.)

$F_i$  or  $(F_c)_i$  = the applicable F or  $F_c$  factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(a), (b), (c), (e) and (f); PPSC PA 77-09]

#### COMS for Periodic Monitoring:

- Periodic monitoring for opacity shall be COMS, which are maintained and operated in conformance with 40 CFR Part 75.
- Periodic monitoring for particulate matter shall be COMS. For any calendar quarter in which more than five percent of the COMS readings show 20% or greater opacity for Units 2, 4, and 5 and 30% or greater opacity for Unit 1 (excluding startup, shutdown, and malfunction periods), a steady-state particulate matter stack test shall be performed within the following calendar quarter. Due to the allowed opacity level of 60% for sootblowing and load changing periods for Units 1 and 2, periods of sootblowing and load changing shall also be excluded for those units. The stack test shall comply with all of the testing and reporting requirements contained in the preceding specific conditions and, where practicable, shall be performed while operating at conditions representative of those showing greater than 20% opacity (30% for Unit 1). Units are not required to be brought on-line solely for the purpose of performing this special test. If the unit does not operate in the following quarter, the special test may be postponed until the unit is brought back on-line. In such cases, the special test shall be performed within 30 days.

[Rule 62-213.440, F.A.C.]

#### B.15. Excess Emission Reports.

(g) Excess emission reports shall be submitted to the Department for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions that shall be reported are defined as follows:

(1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

(2) Sulfur dioxide. Excess emissions for affected facilities are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

(3) Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.  
[40 CFR 60.45(g)]

#### **Other NSPS Subpart D Conditions**

**B.16. Pursuant to 40 CFR 60.41 Definitions.** As used in 40 CFR 60 Subpart D, all terms not defined in 40 CFR 60.41 shall have the meaning given them in the Act, and in Subpart A of 40 CFR 60.

#### **Ambient Air Monitoring**

**B.17. Ambient Air Monitoring.** The owner or operator shall continue to operate the existing ambient monitoring devices for sulfur dioxide and suspended particulate at the two existing locations (sites) designated on Figure A, Ambient Air Monitoring Locations, Crystal River, Florida, attached to this permit. The frequency of operation of each monitoring device for suspended particulate shall be every six days, and continuously for sulfur dioxide, unless otherwise specified by the Department. New or existing monitoring devices shall be located as designated by the Department. The monitoring devices for sulfur dioxide shall meet the requirements of 40 CFR 53.  
[PPSC PA 77-09, and order modifying conditions of certification, OGC Case No. 83-0818, dated February 2, 1984, and Rules 62-213.440 and 62-296.405(1)(c)3., F.A.C.]

**B.18. Flue Gas Desulfurization (FGD) equipment.** Prior to the installation of any FGD equipment, plans and specifications for such equipment shall be submitted to the Department for review and approval.  
[PPSC PA 77-09]

#### **Common Conditions**

**B.19.** These emissions units are also subject to conditions I.1 through I.15, except for I.2 and I.3, contained in Subsection I. **Common Conditions.**

**B.20.** These emissions units are also subject to conditions J.1 through J.5 contained in Subsection J. **NSPS Common Conditions.**

**B.21.** These emissions units are also subject to condition K.1 contained in Subsection K. **Used Oil Common Condition.**

**Subsection C. This section addresses the following emissions units.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
006	Fly ash transfer (Source 1) from Fossil Fuel Steam Generator (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.

Emissions unit 006 is a fly ash transfer (Source 1) from Fossil Fuel Steam Generator (FFSG) Unit 1. This emissions unit consists of the fly ash conveying line, dense phase transfer vessel and separator used to transfer fly ash from the FFSG Unit 1 electrostatic precipitator to the fly ash storage silo (Source 3) at a design transfer rate of 44 tons per hour. Particulate matter emissions are controlled by a Monex Resources, Inc. Model MD80 baghouse at a design air flow of 1820 acfm.

Emissions unit 008 is a fly ash storage silo (Source 3) for FFSG Units 1 and 2. This emissions unit consists of the fly ash storage silo used to store fly ash from the electrostatic precipitators of FFSG Units 1 and 2. Fly ash is pneumatically conveyed from the FFSG Units 1 and 2 ESPs at a combined transfer rate of 174 tons per hour. Particulate matter emissions are controlled by a PulseKing Model M 100 S baghouse at a design air flow of 2546 acfm. Fly ash from the storage silo is disposed of either in a dry form by loading into enclosed tanker trucks or in a wet form by loading wet ash into open trucks.

Emissions unit 009 is a fly ash transfer (Source 4) from FFSG Unit 2. This emissions unit consists of the fly ash conveying line, dense phase transfer vessel and separator used to transfer fly ash from the FFSG Unit 2 ESP number 2C to the fly ash storage silo (Source 3) at a design transfer rate of 60 tons per hour. Particulate matter emissions are controlled by a Monex Resources, Inc. Model MD80 baghouse at a design air flow of 2200 acfm.

Emissions unit 010 is a fly ash transfer (Source 5) from FFSG Unit 2. This emissions unit consists of the fly ash conveying line, dense phase transfer vessel and separator used to transfer fly ash from the FFSG Unit 2 ESP number 2A and 2B to the fly ash storage silo (Source 3) at a maximum design transfer rate of 70 tons per hour. Particulate matter emissions are controlled by a Monex Resources, Inc. Model MD80 baghouse at a design air flow of 2800 acfm.

{Permitting note(s): These emissions units are regulated under Best Available Control Technology (BACT) Determinations ordered 2/5/79 (proposed 1/26/79) and 8/16/79.}

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**C.1. Permitted Capacity.** The transfer rates shall not exceed:

<b>Emissions Unit</b>	<b>Transfer Rate (tons per hour)</b>
006	44
008	174
009	60
010	70

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]



## Emission Limitations and Standards

**C.2. Emission Limitations.** Emissions of particulate matter from the following emissions units shall not exceed:

Emissions Unit	Emission Limit (pounds per hour)	Emission Limit (tons per year)
006	3.5 <sup>a</sup>	15.4 <sup>a</sup>
008	0.6 <sup>a</sup>	2.6 <sup>a</sup>
009	2.2 <sup>b</sup>	9.6 <sup>b, c</sup>
010	2.2 <sup>b</sup>	9.6 <sup>b, c</sup>

**Notes:**

- a Emission limits based on a BACT Determination proposed 1/26/79, ordered 2/5/79. BACT for emissions units 006 and 007 included a VE limit of 5% opacity, six minute average.
- b Emission limits based on a BACT Determination ordered 8/16/79.
- c The tons per year limits for emissions units 009 and 010 have been corrected to one decimal place.  
[AC 09-25791]

**C.3. VE in Lieu of Stack Test.** Because the ash handling system emissions units are controlled with baghouses, the Department has waived particulate matter testing requirements and specified an alternate standard of 5% opacity. If the Department has reason to believe that the particulate emission standard applicable to each emissions unit (006, 008, 009 and 010) is not being met, it may require that compliance be demonstrated by stack testing in accordance with Chapter 62-297, F.A.C.  
[Rule 62-297.620(4), F.A.C.; and, AC 09-256791]

**C.4. Additional Reasonable Precautions for Control of Particulate Matter Emissions.** The owner or operator shall take the following reasonable precautions to control emissions of particulate matter from transport of ash from emissions unit 008 for disposal or use. Ash for transport shall be wetted before loading into open trucks, or dry ash shall be transferred to enclosed tanker trucks.  
[Rule 62-4.070(3), F.A.C.; and, AC 09-256791]

## Monitoring of Operations

**C.5. Annual VE Tests Required.** Each emissions unit (006, 008, 009 and 010) shall be tested for visible emissions annually using EPA Method 9. Each test shall be a minimum of thirty minutes in duration from each exhaust point, while transferring fly ash from both FFSG Units 1 and 2 to the silo (emissions unit 008) at the same time. The tests shall be conducted during a period when both FFSG Units 1 and 2 are operating at 90 to 100% of full load while sootblowing. A statement of the FFSG unit loads, verifying the tests were conducted during sootblowing, shall be submitted with the test reports.  
[Rule 62-4.070(3), F.A.C.; and, AC 09-256791]

{Permitting note: For those emissions points containing a baghouse, the permittee shall perform and record the results of weekly qualitative observations of visible emissions checks (e.g., Method 22) with follow-up Method 9 tests within 24 hours of any abnormal visible emissions.}

## Common Conditions

**C.6.** These emissions units are also subject to conditions I.1 through I.15, except for I.3, contained in Subsection I. Common Conditions.

**Subsection D. This section addresses the following emissions unit.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
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).

Emissions unit 014 is a bottom ash storage silo for FFSG Units 1 and 2, with associated vacuum blower exhausts and bin vent filter (total of three emission points). This emissions unit consists of the system to collect and store bottom ash and economizer ash from both FFSG Units 1 and 2 at a total rate of 16 tons per hour (8 tons per hour from each FFSG unit) at an airflow rate of 2200 scfm from each unit. Ash is conveyed by vacuum from each FFSG unit by a separate vacuum blower, with air and ash passing through a baghouse (filter/separator) where ash is deposited in the silo and air is exhausted through the vacuum blower. Air displaced in the silo is vented through an additional bag filter (the bin vent filter) at an airflow rate of 2400 scfm. Ash stored in the silo is unloaded into trucks for sale, use or disposal at the on-site ash disposal facility. Ash will be wet via a pugmill before loading into open trucks, or dry ash will be transferred to enclosed tanker trucks.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., and by applicable requirements of AC 09-235915.}

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**D.1. Permitted Capacity.** The transfer rates shall not exceed 16 tons per hour (8 tons per hour from each FFSG unit).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**Emission Limitations and Standards**

**D.2. Visible Emissions (VE) Limitation.** Visible emissions shall be less than 20% opacity, six minute average, established by Rule 62-296.320(4)(b)1, F.A.C. See Section II, condition 3 of this permit.

[Rule 62-296.320(4)(b)1, F.A.C.]

**D.3. Additional Reasonable Precautions for Control of Particulate Matter Emissions.** The owner or operator shall take the following reasonable precautions to control emissions of particulate matter from transport of ash from emissions unit 014 for disposal or use. Ash for transport shall be wet via a pugmill before loading into open trucks, or dry ash shall be transferred to enclosed tanker trucks.

[Rule 62-4.070(3), F.A.C.; and, AC 09-235915]

**Monitoring of Operations**

**D.4. Annual VE Tests Required.** Each emission point of emissions unit 014 shall be tested for visible emissions annually using EPA Method 9. Each test shall be a minimum of thirty minutes in duration from each exhaust point, while transferring bottom ash and economizer ash from both FFSG Units 1 and 2 to the silo at the same time at 90-100% of design throughput rate of 8 TPH.

[Rules 62-4.070(3) and 62-296.320(4)(b)4, F.A.C.; AC 09-235915; and, AO 09-248541]

{Permitting note: For those emissions points containing a baghouse, the permittee shall perform and record the results of weekly qualitative observations of visible emissions checks (e.g., Method 22) with follow-up Method 9 tests within 24 hours of any abnormal visible emissions.}

**Common Conditions**

**D.5.** This emissions unit is also subject to conditions **I.1** through **I.15**, except for **I.3**, contained in **Subsection I. Common Conditions**.

**Subsection E. This section addresses the following emissions unit.**

Facility ID No.	E. U. ID No.	Brief Description
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. Emissions from the generator(s) are uncontrolled.

The generators may be relocated to any of the following facilities:

1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
3. Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
6. Hines Energy Complex, County Road 555, 1 mi. southwest of Homeland, Polk County.
7. Anclote Power Plant, 1729 Baileys Road, Holiday, Pasco County

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack. This section of the permit is only applicable when the generator(s) is(are) located at the Crystal River Plant.}

**The following specific conditions apply to the emissions units listed above regardless of location:**

**Essential Potential to Emit (PTE) Parameters**

**E.1. Permitted Capacity.** The maximum (combined) heat input rate shall not exceed 25.74 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**E.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition E.9. [Rule 62-297.310(2), F.A.C.]

**E.3. Methods of Operation - Fuels.** Only new No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight, shall be fired in the diesel generator(s). [Rule 62-213.410, F.A.C.; and, AC 09-202080.]

**E.4. Hours of Operation.** The hours of operation expressed as "engine-hours" shall not exceed 2970 hours in any consecutive 12 month period. The total hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each generator. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC 09-202080.]

**Emission Limitations and Standards**

**E.5. Visible Emissions.** Visible emissions from each generator shall not be equal to or greater than 20 percent opacity, six minute average. [Rule 62-296.320(4)(b)1., F.A.C.; and, AC 09-202080.]

### **Monitoring of Operations**

**E.6. Fuel Sulfur Analysis.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. See specific condition **E.3.** and **E.8.** [Rule 62-213.440, F.A.C.]

### **Test Methods and Procedures**

**E.7.** The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

**E.8.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s).  
[Rules 62-213.440 and 62-297.440, F.A.C.]

**E.9. Operating Rate During Testing.** Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate for each generator. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operations may be limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Failure to submit the actual operating rate may invalidate the test.  
[Rule 62-297.310(2), F.A.C.; and, AC 09-202080]

**E.10. Visible Emissions Testing - Annual.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year.  
[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

**E.11.** After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content. See specific conditions **E.3.**, **E.5.**, and **E.6.**  
[Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and, AO 09-205952.]

### **Record Keeping and Reporting Requirements**

**E.12.** To demonstrate compliance with specific condition **E.4.**, records shall indicate the daily hours of operation for each of the generators, the daily hours of operation expressed as "engine- hours" and the cumulative total hours of operation expressed as "engine-hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Southwest District Office upon request.  
[Rules 62-213.440 and 62-297.310(8), F.A.C.; and, AO 09-205952.]

**E.13.** To demonstrate compliance with specific condition **E.3.**, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Southwest District Office upon request.  
[Rule 62-297.310(8), F.A.C.; and, AC 09-202080.]

**Source Obligation**

**E.14.** Specific conditions in construction permit AC 09-202080, limiting the “engine hours”, were accepted by the applicant to escape Prevention of Significant Deterioration review. If Progress Energy Florida requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(5), F.A.C., as though construction had not yet begun. [Rule 62-212.400(2)(g), F.A.C.; and, AC 09-202080.]

**E.15.** Progress Energy Florida shall notify the Department’s Southwest District Office, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following:

- a. which generator, by serial number, is being relocated,
- b. which location the generator is being relocated from and which location it is being relocated to, and
- c. the approximate startup date at the new location.

If a diesel generator is to be relocated within Pinellas County, then Progress Energy Florida shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management. [Rule 62-4.070(3), F.A.C.; and, AC 09-202080]

**Common Conditions**

**E.16.** This emissions unit is also subject to conditions **I.1** through **I.15**, except for **I.3** and **I.8**, contained in **Subsection I. Common Conditions**.

**Subsection F. This section addresses the following emissions unit.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
013	Cooling towers for FFSG Units 1, 2 and nuclear Unit 3, used to reduce plant discharge water temperature.

Emissions unit 013 is cooling towers for FFSG Units 1, 2 and nuclear Unit 3, used to reduce plant discharge water temperature. (This emission unit may be referred to as "helper cooling towers.") This emissions unit consists of four towers with nine cells per tower, with high efficiency drift eliminators, operating at a maximum seawater flow rate of 735,000 gallons per minute for all cells combined, with a design airflow rate of  $1.46 \times 10^6$  acfm from each cell. Seawater is sprayed through the towers where fan induced air flow causes evaporative cooling. Water vapor, saltwater droplets (drift) and salt particles are emitted. Drift emissions are controlled by high efficiency drift eliminators.

{Permitting note(s): This emissions unit is regulated under Prevention of Significant Deterioration (PSD) (PSD permit AC 09-162037/PSD-FL-139 issued 8/29/90) and Best Available Control Technology (BACT), Determination dated 8/29/90, which set a drift emission rate of 0.004%.}

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**F.1. Hours of Operation.** The operating hours for each cooling tower pump shall not exceed 4320 hours per year (12-month rolling total).  
[Rule 62-210.200(PTE), F.A.C.; and, AC 09-162037 (PSD-FL-139)]

**Emission Limitations and Standards**

**F.2. Cooling Tower Emission Limit.** Emissions of particulate matter from each cooling tower cell shall not exceed 11.9 pounds per hour.  
{Note: The emission limit is based on a BACT Determination setting the maximum drift emissions at 0.004%. Equivalent maximum emissions are 428 lb/hr and 925 tons per year total for all cells. PM<sub>10</sub> emissions are estimated to be approximately 50% of the particulate matter emission rate.}  
[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

**F.3. Drift Eliminators.** Drift eliminators shall be installed and maintained so that minimum bypass occurs. Regular maintenance shall be scheduled to ensure proper operation of the drift eliminators.  
[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

{Note: This emissions unit is not subject to a visible emissions limitation. Emissions from this emissions unit include water droplets so visible emissions testing is not possible.}

**Test Methods and Procedures**

**F.4. Emission Test Method.** The drift elimination system on the helper cooling towers shall be maintained so as to minimize pluggage and to insure timely repair of broken sections of the drift eliminators. During the warm months when the helper cooling towers are used, the following work practice shall be implemented, in lieu of EPA Method 5, to demonstrate compliance with the originally designed removal efficiency (no more than 0.004% drift rate):

- (a) Daily “walkdown” inspection of each operational cell visually checking for problems with the drift eliminators such as pluggage, algae build-up, and mechanical components (fans and pumps).
- (b) Daily visual inspection of the cells which are in operation to ascertain the presence of higher than expected visible emissions when atmospheric conditions allow, and follow-up inspections and correction of problems when the daily visual inspection of the cells indicates a problem.
- (c) Weekly visual inspection of the inlet water screens and prompt correction when broken sections or pluggage is discovered.

[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139); and, ASP No. 00-E-01 dated June 7, 2000]

#### **Monitoring of Operations**

**F.5.** Any problems detected during the work practice inspections identified in Specific Condition **F.4.** shall be documented in a log identifying the cell (or water screen), the inspector, the time (when discovered and the hours operated before the problem was corrected), and a description of the problem and the corrective actions taken. This log shall be maintained onsite and shall be made available to DEP upon request. The log shall be maintained so as to provide an indication as to whether routine inspections have been conducted as required even when there are no problems to record.

[Rules 62-213.440 and 62-297.310(7), F.A.C.; AC 09-162037 (PSD-FL-139); and, ASP No. 00-E-01 dated June 7, 2000]

#### **Record Keeping and Reporting Requirements**

**F.6. Pump Run Time Meters Required.** Equip each cooling tower seawater pump with a run-hour meter and maintain records of run time for each pump based on run-hour meters for each calendar month.

[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

#### **Common Conditions**

**F.7.** This emissions unit is also subject to conditions **I.1** through **I.15**, except for **I.3**, **I.7** and **I.8**, contained in Subsection **I. Common Conditions**.



**Subsection G. This section addresses the following emissions unit.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
015	Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature.

Emissions unit 015 is cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature. (These towers are hyperbolic cooling towers.) Seawater is sprayed through the towers where induced air flow causes evaporative cooling. Water vapor, saltwater droplets (drift) and salt particles are emitted. Drift emissions controlled by high efficiency drift eliminators. Seawater flow rate is 331,000 gallons per minute.

{Permitting note(s): This emissions unit is regulated under Prevention of Significant Deterioration (PSD) (PSD permit PSD-FL-007 issued by EPA as modified by EPA on 11/30/88.)}

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**G.1. Permitted Capacity.** The maximum seawater flow rate shall not exceed 331,000 gallons per minute per cooling tower.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The seawater flow rate limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load) and to aid in determining future rule applicability. Regular record keeping is not required for seawater flow rates. Instead the owner or operator is expected to determine the seawater flow rate whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such seawater flow rate determination may be based on measurements of flow by various methods including but not limited to flow metering or the use of pump curves supplied by the manufacturer to calculate an average hourly seawater flow rate during the test.}

**Emission Limitations and Standards**

**G.2. Cooling Tower Emission Limit.** Emissions of particulate matter shall not exceed 175 lb/hr from each cooling tower.

{Note: The emission limit is based on a BACT Determination requiring control of drift emissions with drift eliminators. The modified PSD permit removed a limitation on drift rate, substituting an emissions limit in pounds per hour. PM emissions are assumed to be all PM<sub>10</sub>.}

[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

{Note: This emissions unit is not subject to a visible emissions limitation. Emissions from this emissions unit include water droplets so visible emissions testing is not possible.}

### **Test Methods and Procedures**

**G.3. Emission Test Method.** Testing shall be in accordance with following requirements:

- a. Particulate matter emissions shall be measured by the sensitive paper method.
- b. Testing shall be conducted either at the drift eliminator level within the tower or at the tower exit plane. (The sampling locations at the drift eliminator level and apparatus are shown in diagrams attached as Appendix P.)
- c. No less than three test runs shall be conducted for each test and all valid data from each of these test runs shall be averaged to demonstrate compliance. No individual test run result shall determine compliance or noncompliance. The emission rate reported as a percent of the circulating water, as well as lb/hr., and total dissolved solids in the cooling tower basin and intake water, shall be reported for each test run.

[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

### **Monitoring of Operations**

**G.4. Test Every Five Years.** The FFSG Unit 4 cooling tower shall be tested every five years from 1988 (the next required year from the effective date of this permit is 2003). The FFSG Unit 5 cooling tower shall be tested every five years from 1992 (the next required year from the effective date of this permit is 2002).

[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88, request of applicant]

**G.5. Inspection.** The drift eliminators of both towers shall be inspected from the concrete walkways not less than every three months by Progress Energy Florida Power Corporation staff or representatives to assure that the drift eliminators are clean and in good working order. Not less than annually, a complete inspection of the towers shall be conducted by a qualified inspector ~~manufacturer of drift eliminators or by a consultant~~ with recognized expertise in the field.

Certification that the drift eliminators are properly installed and in good working order shall be ~~made at the time of submission of the reports~~ provided in the record keeping and reporting requirements noted below.

[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

### **Record Keeping and Reporting Requirements**

**G.6. Reporting.** Reports on tower testing and inspection shall be ~~submitted~~ handled as follows:

- a. Maintained within onsite files ~~W~~within 30 days after all visual inspections of the drift eliminators.
- b. Agency Submittal ~~W~~within 45 days after the compliance testing of either tower.

[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

**G.7. Excess Emissions.** Should either tower emission rate exceed 175 lb/hr, the permittee shall:

- a. Notify EPA and the Department within 10 days of becoming aware of the exceedence.
- b. Provide an assessment of necessary corrective actions and a proposed schedule of implementation within an additional 20 days.
- c. Expeditiously complete corrective actions.
- d. Retest the tower within three months after the correction is completed.
- e. Submit the testing report within 45 days after completion of said tests.

[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

### **Common Conditions**

**G.8.** This emissions unit is also subject to conditions **I.1** through **I.15**, except for **I.3**, **I.7** and **I.8**, contained in Subsection **I. Common Conditions**.

**Subsection H. This section addresses the following emissions unit.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
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<sub>10</sub> from these activities.

{Permitting note(s): This emissions unit 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.}

**The following specific conditions apply to the emissions unit(s) listed above:**

**Emission Limitations and Standards**

**H.1. Pursuant to 40 CFR 60.252 Standards for Particulate Matter.**

(c) 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.

[40 CFR 60.252 (coal facilities associated with Units 4 and 5)]

**H.2. Visible Emissions.** 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, six minute average.

[PPSC PA 77-09 (coal facilities associated with Units 1, 2, 4 and 5)]

**H.3. PM Control -- BMPs.** The owner or operator shall control particulate emissions (PM and PM<sub>10</sub>) through the practices described in the Best Management Plan authored by KBN, November 1990, and distributed to FPC staff November 21, 1990, by Mr. W. Jeffrey Pardue.

[AC 09-162037, PSD-FL-139 (for construction of helper cooling towers) specific condition 3]

**Test Methods and Procedures**

**H.4. Visible Emissions. (This condition applies to coal facilities associated with emissions units 004 and 003 -- FFSG Units 4 and 5.) Pursuant to 40 CFR 60.254 Test Methods and Procedures.**

(2) EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

[40 CFR 60.254]

**H.5. Visible Emissions. (This condition applies to coal facilities associated with emissions units 001 and 002 -- FFSG Units 1 and 2.) VE Test Method.** EPA Method 9 shall be used to determine opacity.

[Rules 62-4.070(3), 62-213.440 and 62-297.401, F.A.C.]

{Permitting note: For those emissions points containing a baghouse, the permittee shall perform and record the results of weekly qualitative observations of visible emissions checks (e.g., Method 22) with follow-up Method 9 tests within 24 hours of any abnormal visible emissions.}

**Common Conditions**

**H.6.** This emissions unit is also subject to conditions **I.1, I.2, I.4, I.5, and I.14** (condition **I.2** is also not applicable to activities at units subject to NSPS 40 CFR 60 (i.e., activities at FFSG Units 4 and 5) contained in **Subsection I. Common Conditions**. This emissions unit is also subject to conditions **I.6.(a)9 & (b), I.12(a)2 and I.15.(a) & (b)**; the other provisions of conditions **I.6, I.12 and I.15** are not applicable to this emissions unit.

**H.7.** These emissions units are also subject to conditions **J.1, J.2, J.3(b), (c) and (d) and J.4** contained in **Subsection J. NSPS Common Conditions**.

**Subsection I. Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
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	Three relocatable diesel fired generators, rated at 0.82 MW, 8.58 MMBtu/hr
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

Except as otherwise specified under Subsections A. through H., the following conditions apply to the emissions units listed above:

**Essential Potential to Emit (PTE) Parameters**

**I.1. Hours of Operation.** The emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

**Emission Limitations and Standards**

{Permitting Notes: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**Excess Emissions**

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.}

**I.2. (This condition is not applicable to emissions units 004 and 003 - FFSG Units 4 and 5.)** Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

**I.3. (This condition applies to emissions units 001 and 002 - FFSG Units 1 and 2.)** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]

**I.4. Excess emissions** which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.  
[Rule 62-210.700(4), F.A.C.]

### **Monitoring of Operations**

#### **I.5. Determination of Process Variables.**

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.  
[Rule 62-297.310(5), F.A.C.]

**I.6. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

#### **(a) General Compliance Testing.**

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or 100 tons per year or more of any other regulated air pollutant; and

c. Any NESHAP pollutant.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) **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.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.  
[Rule 62-297.310(7), F.A.C.; SIP approved]

**I.7. When PM Tests Not Required**. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

#### **Test Methods and Procedures**

{Permitting Notes: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**I.8. (This conditions applies to emissions units 001, 002, 003, 004, 006, 008, 009, 010, & 014.) Visible Emissions**. The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.  
[Rules 62-204.800 and 62-297.401, F.A.C.]

**I.9. Required Number of Test Runs**. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.  
[Rule 62-297.310(1), F.A.C.]

**I.10. Calculation of Emission Rate**. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.  
[Rule 62-297.310(3), F.A.C.]

**I.11. Operating Rate During Testing**. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15

consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

**I.12. Applicable Test Procedures.**

**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

**(b) Minimum Sample Volume.** Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

**(c) Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

**(d) Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

**(e) Allowed Modification to EPA Method 5.** When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

**I.13. Required Stack Sampling Facilities.** When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

**Record Keeping and Reporting Requirements**

**I.14. Malfunctions - Notification.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Southwest District Air Section in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Southwest District Air Section.

[Rule 62-210.700(6), F.A.C.]

**I.15. Test Reports.**

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Southwest District Air Section on the results of each such test.

(b) The required test report shall be filed with the Southwest District Air Section as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Southwest District Air Section to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.



3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**Subsection J. NSPS Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
004	Fossil Fuel Steam Generator, Unit 4, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, with number 2 fuel oil as a startup fuel, with emissions exhausted through a 600 ft. stack.
003	Fossil Fuel Steam Generator, Unit 5, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, with number 2 fuel oil as a startup fuel, with emissions exhausted through a 600 ft. stack.
016	Material handling activities for coal-fired steam units subject to NSPS (i.e., activities at Fossil Fuel Fired Steam Generators Units 4 and 5.

{Permitting Notes: The emissions units above are subject to the following conditions from 40 CFR 60 Subpart A, General Provisions. The affected facilities to which this subpart applies are fossil fuel steam generators Unit 4 and Unit 5. To the extent allowed by law, the "Administrator" shall mean the "Department."}

**The following conditions apply to the NSPS emissions units listed above:**

**J.1. Pursuant to 40 CFR 60.7 Notification And Record Keeping.**

(a) Any owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(b) The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see 40 CFR 60.7(d)) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

*[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]*

(e)(1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For one full year (e.g., four quarterly or twelve monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all record keeping and monitoring requirements specified in this subpart and the applicable standard; and

(iii) The Administrator does not object to reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required record keeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7 and Rule 62-213.440(1)(b)2.b., F.A.C.]

**J.2. Pursuant to 40 CFR 60.8 Performance Tests.**

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8]

**J.3. Pursuant to 40 CFR 60.11 Compliance With Standards And Maintenance Requirements.**

(a) Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

(b) Compliance with opacity standards in 40 CFR 60.11 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60.11, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).

(c) The opacity standards set forth in 40 CFR 60.11 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e)(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11]

**J.4. Pursuant to 40 CFR 60.12 Circumvention.**

No owner or operator subject to the provisions of 40 CFR 60.12 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

**J.5. Pursuant to 40 CFR 60.13 Monitoring Requirements.**

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Owners and operators of all continuous emission monitoring systems installed in accordance with the provisions of 40 CFR 60.13 shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13]

**Subsection K. Used Oil Common Condition.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Fossil Fuel Steam Generator, Unit 1
002	Fossil Fuel Steam Generator, Unit 2
004	Fossil Fuel Steam Generator, Unit 4
003	Fossil Fuel Steam Generator, Unit 5

{Permitting Notes: The emissions units above are subject to the following condition which allows the burning of on-specification used oil pursuant to the requirements of this permit and this subsection.}

**The following condition applies to the emissions units listed above:**

**K.1. Used Oil.** Burning of on-specification used oil is allowed in emissions units 001, 002, 004 and 003 in accordance with all other conditions of this permit and the following conditions:

- a. On-specification Used Oil Allowed as Fuel: This permit allows the burning of used oil fuel meeting EPA "on-specification" used oil specifications, with a PCB concentration of less than 50 ppm. Used oil that does not meet the specifications for on-specification used oil shall not be burned at this facility.

On-specification used oil shall meet the following specifications: [40 CFR 279, Subpart B.]

Arsenic shall not exceed 5.0 ppm;  
Cadmium shall not exceed 2.0 ppm;  
Chromium shall not exceed 10.0 ppm;  
Lead shall not exceed 100.0 ppm;  
Total halogens shall not exceed 1000 ppm;  
Flash point shall not be less than 100 degrees F.

- b. Quantity Limited: The maximum quantity of on-specification used oil that may be burned in all four emissions units combined is 10 million gallons in any consecutive 12-month period.
- c. Used Oil Containing PCBs Not Allowed: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- d. PCB Concentration of 2 to less than 50 ppm: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

Before accepting from each marketer the first shipment of on-specification used oil with a PCB concentration of 2 to 49 ppm, the owner or operator shall provide each marketer with a one-time written and signed notice certifying that the owner or operator will burn the used oil in a qualified combustion device and must identify the class of combustion device. The notice must state that EPA or a RCRA-delegated state agency has been given a description of the used oil management activities at the facility and that an industrial boiler or furnace will be used to burn the used oil with a PCB concentration of 2 to 49 ppm. The description of the used oil management activities shall be submitted to the EPA or may be submitted to the Administrator, Hazardous Waste Regulation Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400. A copy of the notice provided to each marketer shall be maintained at the facility. [40 CFR 279.61 and 761.20(e)]

- e. Certification Required: The owner or operator shall receive from the marketer, for each load of used oil received, a certification that the used oil meets the specifications for on-specification used oil and contains a PCB concentration of less than 50 ppm. This certification shall also describe the basis for the certification, such as analytical results.

Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs. Note that a claim that used oil does not contain quantifiable levels of PCBs (that is, that the used oil contains less than 2 ppm of PCBs) must be documented by analysis or other information. The first person making the claim that the used oil does not contain PCBs is responsible for furnishing the documentation. The documentation can be tests, personal or special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the used oil contains no detectable PCBs.

- f. Testing Required: The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs\*, and specific gravity.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods), latest edition.

\* Analysis for PCBs is not required if a claim is made that the used oil does not contain quantifiable levels of PCBs.

- g. Record Keeping Required: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department: [40 CFR 279.61 and 761.20(e)]

- (1) The gallons of on-specification used oil accepted and burned each month in each unit. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period in each unit. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (3) Results of the analyses required above, including documentation if a claim is made that the used oil does not contain quantifiable levels of PCBs.
- (4) The source and quantity of each batch of used oil received each month, including the name, address and EPA identification number (if applicable) of all marketers that delivered used oil to the facility, and the quantity delivered.
- (5) Records of the operating rate of each unit while burning used oil and the dates and time periods each unit burns used oil.

- h. Reporting Required: The owner or operator shall submit to the Department's Southwest District office, with the Annual Operation Report form, an attachment showing the total amount of on-specification used oil burned during the previous calendar year. The quantity of used oil shall be individually reported and shall not be combined with other fuels.

[Rules 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, and 0170004-002-AO, unless otherwise noted]



**Section IV. This section is the Acid Rain Part.**

**Operated by:** Progress Energy Florida/Crystal River Plant  
**ORIS code:** 628

**This subsection addresses Acid Rain, Phase II.**

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Brief Description
001	Fossil Fuel Steam Generator, Unit 1
002	Fossil Fuel Steam Generator, Unit 2
004	Fossil Fuel Steam Generator, Unit 4
003	Fossil Fuel Steam Generator, Unit 5

**A.1.** The Phase II permit applications, the Phase II NO<sub>x</sub> compliance plans and the Phase II NO<sub>x</sub> averaging plans submitted for this facility, as approved by the Department, are a part of this permit (included as Attachments). The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the applications listed below:

- DEP Form No. 62-210.900(1)(a), F.A.C., Signed 6/29/04.
- DEP Form No. 62-210.900(1)(a)4., F.A.C., Signed 6/29/04.
- DEP Form No. 62-210.900(1)(a)5., F.A.C., Signed 06/29/04.

[Chapter 62-213 and Rule 62-214.320, F.A.C.]

**A.2.** Sulfur dioxide (SO<sub>2</sub>) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2005	2006	2007	2008	2009
001	1	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	12425*	12425*	12425*	12425*	12425*
002	2	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	14291*	14291*	14291*	14291*	14291*
004	4	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	23651*	23651*	23651*	23651*	23651*
003	5	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	25248*	25248*	25248*	25248*	25248*

\* The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

E.U. ID No.	EPA ID	NO <sub>x</sub> limit	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO <sub>x</sub> emissions averaging plans for this unit. Each plan is effective for one calendar year for the 2005, 2006, 2007, 2008 and 2009. Under each plan, the unit's NO <sub>x</sub> emissions shall not exceed the annual average alternative contemporaneous emission limitation of:
001	1		<b>0.45 lb/MMBtu.</b> In addition, this unit shall not have an annual heat input <b>greater than 36,312,329 MMBtu.</b>
002	2		<b>0.45 lb/MMBtu.</b> In addition, this unit shall not have an annual heat input <b>greater than 41,934,711 MMBtu.</b>
004	4		<b>0.52 lb/MMBtu.</b> In addition, this unit shall not have an annual heat input <b>greater than 70,658,210 MMBtu.</b>
003	5		<b>0.52 lb/MMBtu.</b> In addition, this unit shall not have an annual heat input <b>greater than 70,208,037 MMBtu.</b>
Also, see Additional Requirements 1, 2 and 3, below.			

{Permitting note: See Specific Condition B.7. for unit specific state-only annual NO<sub>x</sub> emission limits related to E.U. 003 and 004}

#### Additional Requirements

- Under the plan (NO<sub>x</sub> Phase II averaging plan), the actual Btu-weighted annual average NO<sub>x</sub> emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.
- In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only after the North Carolina Department of Environment and Natural Resources Division of Air Quality and the South Carolina Department of Health and Environmental Control Bureau of Air Quality have also approved this averaging plan.
- In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

**A.3. Emission Allowances.** Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

**A.4. Fast-Track Revisions of Acid Rain Parts.** Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

Reporting Requirements

A.6. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 51., APPENDIX TV-4 TITLE V CONDITIONS}

[Rule 62-214.420(11), F.A.C.]

A.7. Demonstration of Compliance with the Phase II NO<sub>x</sub> Averaging Plan. The Designated Representative shall provide a copy of the demonstration of compliance, prepared in accordance with 40 CFR 76.11(d), to the Department within 60 (sixty) days after the end of the calendar year.

[Rule 62-213.440, F.A.C.]

**Table 1-1, Summary of Air Pollutant Emission Standards**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
001	Fossil Fuel Steam Generator, Unit No. 1
002	Fossil Fuel Steam Generator, Unit No. 2

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
VE (Unit 1)	Coal No. 2 fuel oil as ignitor <sup>a</sup>	8760	40% opacity					Rule 62-296.405(1)(a), F.A.C.; and Order dated 12/12/86	A.4.a.
VE (Unit 2)	Coal No. 2 fuel oil as ignitor <sup>a</sup>	8760	20% opacity (except for one two-minute period per hour, opacity $\leq$ 40%)					Rule 62-296.405(1)(a), F.A.C.	A.4.b.
VE Soot Blowing & Load Change	Coal No. 2 fuel oil as ignitor <sup>a</sup>	8760	60% opacity during 3-hours in any 24 hour period of excess emissions					Rule 62-210.700(3), F.A.C.	A.5.

**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit		Brief Description							
001		Fossil Fuel Steam Generator, Unit No. 1							
002		Fossil Fuel Steam Generator, Unit No. 2							

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
PM	All	8760	0.1 lb/mmBtu			375 (Unit 1) 479.5 (Unit 2)	1642.5 (Unit 1) 2100.2 (Unit 2)	Rule 62-296.405(1)(b), F.A.C.	A.6.
PM Soot Blowing & Load Change	All	8760	0.3 lb/mmBtu during the 3-hours in any 24-hour period of excess emissions.			1125 (Unit 1) 1438.5 (Unit 2)	615.9 (Unit 1) 787.6 (Unit 2)	Rule 62-210.700(3), F.A.C.	A.7.
SO <sub>2</sub>	Coal No. 2 fuel oil as ignitor <sup>a</sup>	8760	2.1 lb/mmBtu heat input			7875 (Unit 1) 10,069.5 (Unit 2)	34,492.5 (Unit 1) 44,104.4 (Unit 2)	Rule 62-213.440, F.A.C.; PPSC PA 77-09; and 0170004-003-AC	A.8.(a)
SO <sub>2</sub>	Coal/Briquette Mixture Shipment	8760	1.05% Sulfur, by weight averaged on a annual basis			6262.5 (Unit 1) 8007.65 (Unit 2)	27,430 (Unit 1) 35,074 (Unit 2)	Rule 62-213.440, F.A.C. and 0170004-006-AC	A.8.(b)

Note for Units 1 and 2:

a Used oil may be used as a fuel for Units 1 and 2 pursuant to specific condition K.1 and other conditions of this permit.

**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
004	Fossil Fuel Steam Generator, Unit No. 4
003	Fossil Fuel Steam Generator, Unit No. 5

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions <sup>b</sup>		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
PM	All <sup>a</sup>	8760	0.10 lb/mmBtu			666.5	2919.3	40 CFR 60.42(a)(1) & (2)	B.4.
VE	All <sup>a</sup>	8760	20% opacity (except for one six-minute period per hour of 27% opacity)					40 CFR 60.42(a)(1) & (2)	B.4.
SO <sub>2</sub>	Oil or Coal <sup>a</sup>	8760	0.80 lb/mmBtu for liquid fossil fuel 1.2 lb/mmBtu for solid fossil fuel			5332 (liquid) 7998 (solid)	23,354.2 (liquid) 35,031.2 (solid)	40 CFR 60.43(a), (b) and (c), and PPSC PA 77-09	B.5.(a)
SO <sub>2</sub>	Coal/Briquette Mixture Shipments <sup>a</sup>	8760	0.68%, by weight, averaged on a annual basis			7265	31,820	Rule 62-213.440, F.A.C. and 0170004-006-AC	B.5.(b)
NO <sub>x</sub>	All <sup>a</sup>	8760	0.30 lb/mmBtu for liquid fossil fuel 0.70 lb/mmBtu for solid fossil fuel			1999.5 (liquid) 4665.5 (solid)	8757.8 (liquid) 20,434.9 (solid)	40 CFR 60.44(a)(2) and (3), and (b), and PPSC PA 77-09	B.6.

Notes for Units 4 and 5:

a Number 2 fuel oil allowed as a startup fuel and natural gas allowed as a startup and low-load flame stabilization fuel. Used oil may be used as a fuel for Units 3 and 4 pursuant to specific condition K.1 and other conditions of this permit.

b Equivalent emissions are for each emission unit.

c See Specific Condition B.7. for unit specific state-only annual NO<sub>x</sub> emission limits related to Units 3 and 4

**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
006	Fly ash transfer (Source 1) from Fossil Fuel Steam Generator (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.

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
PM for Unit 006		8760		3.5	15.4			BACT, AC 09-256791	C.2.
PM for Unit 008		8760		0.6	2.6			BACT, AC 09-256791	C.2.
PM for Unit 009		8760		2.2	9.6			BACT, AC 09-256791	C.2.
PM for Unit 010		8760		2.2	9.6			BACT, AC 09-256791	C.2.
VE for Units 006, 008, 009 & 010		8760	5% opacity					Rule 62-297.620(4), F.A.C., AC 09-256791	C.2. & C.3.

**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
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).

			Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY		
VE		8760	20% opacity					Rule 62-296.320(4)(b)1, F.A.C.	D.2.



**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit		Brief Description							
012		Three Relocatable Diesel Fired Generators.							
Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
VE	Number 2 fuel oil, max. 0.5 wt. % S	2970	20% opacity					Rule 62-296.320(4)(b)1., F.A.C.; and AO 09-205952	E.5.
SO <sub>2</sub>	Number 2 fuel oil, max. 0.5 wt. % S	2970	Maximum 0.5% S by weight			13.2	19.8	Rule 62-213.410, F.A.C.	E.3

Note for emissions unit 012:

Equivalent emissions are for all three diesel generators combined.

**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit		Brief Description							
013		Cooling towers for FFSG Units 1, 2, and 3, used to reduce plant discharge water temperature.							
Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
PM		4320		11.9, each cell		428, all cells	925, all cells	Rule 62-213.440, F.A.C., AC 09-162037 (PSD-FL-139)]	F.2.

Emissions Unit		Brief Description							
015		Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature.							
Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
PM		8760		175, each tower			766.5, each tower	Rule 62-213.440, F.A.C.; Modified PSD permit, PSD-FL-007	G.2.

**Table 1-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit		Brief Description							
016		Material handling activities for coal-fired steam units.							
Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions <sup>1</sup>		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lb./hour	TPY	lb./hour	TPY		
VE		8760	20% opacity					40 CFR 60.252 (Units 4 and 5) and PPSC PA77-09 (Units 1, 2, 4 and 5)]	H.1 & H.2
PM		8760	Practices described in the Best Management Plan					AC 09-162037, PSD-FL-139 specific condition 3	H.3

Notes for all tables:

<sup>1</sup> The "Equivalent Emissions" listed are for informational purposes only.

NA = not applicable

**Table 2-1, Summary of Compliance Requirements**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
001	Fossil Fuel Steam Generator, Unit No. 1
002	Fossil Fuel Steam Generator, Unit No. 2

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
PM	All <sup>a</sup>	EPA Methods 17 or 5	Annual	June 1st	3 hours	--	A.9
VE	All <sup>a</sup>	EPA Method 9	Annual	June 1st	1 hour	Yes	A.10
SO <sub>2</sub>	All <sup>a</sup>	EPA Methods 6, 6A, 6B, or 6C.	Each year fuel sampling not performed	June 1st, if required	3 hours	No	A.11
SO <sub>2</sub>	All <sup>a</sup>	Fuel sampling and analysis	As fired			--	A.12, A.13

Note for Units 1 and 2:

a Used oil may be used as a fuel for Units 1 and 2 pursuant to specific condition K.1 and other conditions of this permit.

**Table 2-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
004	Fossil Fuel Steam Generator, Unit No. 4
003	Fossil Fuel Steam Generator, Unit No. 5

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
VE	All <sup>a</sup>	EPA Method 9	Annual	June 1st	1 hour	Yes	B.8, B.13
PM	All <sup>a</sup>	EPA Methods 5 and 17	Annual	June 1st	3 hours	--	B.8, B.13
SO <sub>2</sub>	All <sup>a</sup>	EPA Methods 6, 6A, 6C	Annual	June 1st	3 hours	Yes	B.8, B.13
SO <sub>2</sub>	Coal/Briquette <sup>a</sup>	Fuel Sampling and Analysis	Annual	--	--	--	B.10, B.11, B.13
NO <sub>x</sub>	All <sup>a</sup>	EPA Methods 7, 7A, 7C, 7D, 7E	Annual	June 1st	3 hours	Yes	B.8, B.13

Note for Units 4 and 5:

a Number 2 fuel oil allowed as a startup fuel and natural gas allowed as a startup and low-load flame stabilization fuel. Used oil may be used as a fuel for Units 3 and 4 pursuant to specific condition K.1 and other conditions of this permit.

**Table 2-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
006	Fly ash transfer (Source 1) from Fossil Fuel Steam Generator (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.

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
VE	NA	EPA Method 9	Annual	June 1st	Thirty minutes	No	C.5.

Emissions Unit	Brief Description
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).

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
VE	NA	EPA Method 9	Annual	June 1st	Thirty minutes	No	D.4.

**Table 2-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit		Brief Description					
012		Three Relocatable Diesel Fired Generators					
Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
SO <sub>2</sub>	Number 2 Fuel Oil	Fuel Sulfur Analysis, ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s)	Upon each fuel delivery			--	E.6, E.8
VE	Number 2 Fuel Oil	EPA Method 9	Annual Not required when burned liquid fuels for less than 400 hours in the previous year	October 25th	Thirty minutes	No	E.7, E.10
VE & SO <sub>2</sub>	Number 2 Fuel Oil	After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content	After relocation				E.11

**Table 2-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
013	Cooling towers for FFSG Units 1, 2, and 3, used to reduce plant discharge water temperature.

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
PM	NA	Work Practices	See Permit Condition F.4.	N/A	N/A	No	F.4. and F.5.



**Table 2-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit		Brief Description					
015		Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature.					
Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
PM	NA	Sensitive paper method	See note (a) of this table	See note (a) of this table		No	G.3.
Inspection of the drift eliminators	NA	By Florida Power Corporation staff or representatives	not less than every three months				G.5.
Inspection of the towers	NA	By a manufacturer of drift eliminators or by a consultant with recognized expertise in the field	Not less than annually				G.5.

Note for Emissions Unit 015:

(a) The Unit 4 cooling tower shall be tested every five years from 1989 (the next required year from the effective date of this permit is 1999) between October 1st and December 31st. The Unit 5 cooling tower shall be tested every five years from 1992 (the next required year from the effective date of this permit is 1997) between January 1st and May 1st.

**Table 2-1, Continued**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
016	Material handling activities for coal-fired steam units.

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
VE	NA	EPA Method 9	<del>Annual</del> As needed	June 1st	Thirty minutes	No	H.4., H.5.

Notes for all tables:

<sup>1</sup> Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>2</sup> CMS = continuous monitoring system

NA = not applicable

### Appendix H-1, Permit History/ID Number Changes

**Permit History (for tracking purposes):**

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date <sup>1,2</sup>	Revised Date(s)
001	Unit 1	AO 09-169341	12/20/89	12/18/94		2/11/94 2/6/97 6/30/99
002	Unit 2	AO 09-191820	5/21/91	5/21/96		6/24/91 2/11/94 2/6/97 6/30/99
001 & 002	Units 1 and 2 Used Oil Firing	0170004-002-AO (Mod. of above permits)	9/16/96			
004, 003, 015	Units 4 & 5, & Cooling Towers for 4 & 5	PSD Permit PSD-FL-007	3/30/78 2/27/80			11/30/88
004, 003	Power Plant Siting Certification, Units 4 & 5 (Incl. Limits on Sulfur for Units 1 & 2)	PA 77-09	11/21/78			2/22/80 5/22/80 5/6/82 2/2/84 7/3/84 9/12/97 6/30/99
006, 008, 009, 010	Units 1 & 2 Flyash Handling System (Sources 1, 4 & 5)	AC 09-184438 AC 09-256791 (Replaced AC 09- 184438)	11/9/90 11/17/94	10/31/91 01/15/96		
008	Units 1 & 2 Flyash Transfer Silo (Source 3)	AO 09-193593	3/26/91	10/31/91		
006, 008, 009, 010	Units 1 & 2 Flyash Handling System (Sources 1, 3, 4 & 5)	AO 09-202440	11/8/91	10/31/96		

### Appendix H-1, Permit History/ID Number Changes, Continued

#### Permit History, Continued:

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date <sup>1, 2</sup>	Revised Date(s)
014	Units 1 & 2 Bottom/Economizer Ash Handling System	AC 09-235915	10/4/93	6/1/94		
014	Units 1 & 2 Bottom Ash Handling	AO 09-248541	7/21/94	7/15/99		
012	Diesel Generators	AO 09-205952	4/27/92	3/31/97		
013	Four Helper Cooling Towers	AC 09-162037 & PSD-FL-139	8/29/90	10/1/93	12/1/93	
013	Four Helper Cooling Towers	AO 09-236827	10/20/93	10/1/98		
All	Initial Title V Permit	0170004-004-AV	01/01/00	12/31/04		3/29/01

#### ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 09TPA0004

To: **Facility ID No.:** 0170004

#### Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}

## Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Progress Energy Florida  
Crystal River Plant

DRAFT Permit No.: 0170004-009-AV  
Facility ID No.: 0170004

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
017	Fuel and lube oil tanks and vents <sup>1</sup>
018	Sewage treatment, water treatment, lime storage <sup>2</sup>
019	<del>Two</del> <u>Three</u> 3500 kW diesel generators associated with Unit 3

### Notes:

- 1 This unregulated emissions unit consists of the following facilities:

Associated with Units 1 and 2:

Number 2 fuel oil, 210,000 gal capacity, tank # 10, and 20,200 gal capacity, tank # 11.

Lube oil vents, one each at Unit 1 and 2.

Rotocloner with air filter at Unit 1.

Oil vent at Unit 1.

Associated with Unit 3:

Equipment diesel tanks, tanks 2 through 8, 15, 16, 22 and 23, capacities from 30 gallons to 30,118 gallons.

Lube oil tank, 25,000 gallon capacity, tank #9.

Two small cooling towers west of Main Building.

Two lube oil vents.

Associated with Units 4 and 5:

Number 2 fuel oil, 256,200 gal capacity, tank # 1, and 255,318 gal capacity, tank # 2.

Equipment diesel tanks, tanks 3 and 4, capacity of 250 gallons, each.

Lube oil tank, 30,000 gallon capacity, tank #16.

Lube oil vents.

Associated with the Crystal River Site:

Equipment diesel tanks, E.O.F. #01, capacity of 2,000 gallons and E.O.F. # 02, capacity of 25 gallons.

Waste oil tank, Garage # 01, 150 gallon capacity.

Mineral spirits tanks, O.C. # 01, 80 gallon capacity, N. Sub. # 04, 1,100 gallon capacity.

Transmission oil tanks, N. Sub. # 01 through 03, capacity of 1,100 gallons each.

UST for diesel-2 @ 10,000 gallons each

UST for gasoline - 1 @ 10,000 gallons

- 2 This unregulated emissions unit consists of the following facilities:

Associated with Units 4 and 5:

Water treatment systems for ~~Units 4 and 5~~ all EUSGUs.

Associated with the Crystal River Site:

Sewage treatment plant.

Lime storage.

## Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Progress Energy Florida  
Crystal River Plant

DRAFT Permit No.: 1070004-009-AV  
Facility ID No.: 1070004

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The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62-210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

---

### Brief Description of Emissions Units and/or Activities

---

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.
6. ~~Two fire protection tanks at Unit 3.~~
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).

## **APPENDIX CAM**

### **Compliance Assurance Monitoring Requirements**

## **Compliance Assurance Monitoring Requirements**

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

### **40 CFR 64.6 Approval of Monitoring.**

1. The attached CAM plan(s) is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.  
[40 CFR 64.6(a)]
2. The attached CAM plan(s) include the following information:
  - (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
  - (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
  - (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.[40 CFR 64.6(c)(1)]
3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 9.**) and reporting exceedances or excursions (see **CAM Conditions 10. - 14.**).  
[40 CFR 64.6(c)(2)]
4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 17.**).  
[40 CFR 64.6(c)(3)]

### **40 CFR 64.7 Operation of Approved Monitoring.**

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.  
[40 CFR 64.7(a)]
6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
[40 CFR 64.7(b)]
7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the



operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

**8. Response to excursions or exceedances.**

- a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

**9. Documentation of need for improved monitoring.** If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

**40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.**

**10.** Based on the results of a determination made under **CAM Condition 8.a.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

**11. Elements of a QIP:**

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

- (i) Improved preventive maintenance practices.
- (ii) Process operation changes.
- (iii) Appropriate improvements to control methods.
- (iv) Other steps appropriate to correct control performance.
- (v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i) through (iv)**, above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

- a. Failed to address the cause of the control device performance problems; or
- b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

#### **40 CFR 64.9 Reporting And Recordkeeping Requirements.**

15. General reporting requirements.

- a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
- b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
  - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10. through 14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. General recordkeeping requirements.

- a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data,

monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10. through 14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

#### **40 CFR 64.10 Savings Provisions.**

17. It should be noted that nothing in this appendix shall:

- a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
- b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

**Progress Energy - Crystal River Plant**

**Emissions Units 001, 002, 003 & 004**

**Two tangentially fired coal units and two dry bottom wall-fired units;  
Particulate Matter emissions controlled by Electrostatic Precipitators**

**Monitoring Approach and Corrective Action Procedures**

**Table 1. Monitoring Approach**

	<u><b>Indicator</b></u>
I. Indicator	Opacity.
Measurement Approach	Continuous opacity monitoring system (COMS).
II. Indicator Range	<p>An excursion is defined as any 1 hour of opacity greater than 12% (other than startup, shutdown, "load-changing" and sootblowing periods) for Units 2, 4 and 5. An excursion is defined as any 1 hour of opacity greater than 20% (other than startup, shutdown, "load-changing" and sootblowing periods) for Unit 1.</p> <p>Load-changing occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.</p>
III. Performance Criteria	
A. Data Representativeness	Based on available opacity data while stack testing, the representative stack opacity of units 2, 4 and 5 is in the range of 2 to 12%. Based upon available opacity data while stack testing, the representative stack opacity of Unit 1 is in the range of 5 to 20%.
B. Verification of Operational Status	Annual testing during normal operation is used to verify particulate mass loading. The COM system is audited quarterly.
C. QA/QC Practices and Criteria	Install and operate COMS according to 40 CFR Part 60 Appendix B, Performance Specification 1 and general provisions 60.13.
D. Monitoring Frequency	Continuous.
E. Data Collection Procedures	The COMS collects data that are reduced to 6-minute averages. Consecutive 6-minute averages are tracked through the Distributed Control System (DAS) and CEM software.
F. Averaging Period	Ten consecutive 6-minute averages.

**Table 2. Corrective Action Procedures Summary**

	<b><u>Description for Indicator</u></b>
<b>I. Initiation of Corrective Action Procedures</b>	Corrective action shall be initiated with the discovery of any 1 hour of opacity greater than the level that defines an excursion. The plant staff that made the discovery shall immediately notify the shift supervisor or responsible official. This action describes a corrective action trigger.
<b>II. Time of Completion of Corrective Action Procedures</b>	As soon as practically possible.
<b>III. Corrective Action</b>	<p>The shift supervisor or responsible official will implement the following as a corrective action.</p> <ul style="list-style-type: none"><li>• Perform operational diagnostics to identify cause of the excursion;</li><li>• If operational diagnostics indicate a malfunction of the ESP, the reason for failure will be identified;</li><li>• ESP operation will be restored to ensure opacity below excursion levels; and</li><li>• In the event of the need for load reductions or unit shutdown to bring opacity to below excursion levels, the task will be undertaken utilizing best operational practices to minimize emissions. Regardless of the failure mechanism, ESP operation will be restored such that the cause of excursion is identified and appropriate actions taken to ensure opacity below excursion levels.</li></ul>

# Phase II Permit Application

Page 1

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: ☒ New ☐ Revised

Crystal River, FL 628

Compliance Plan				
a	b	c	d	e
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes	No		
2	Yes	No		
4	Yes	No		
5	Yes	No		
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

☐

For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

the box if the  
is in column c  
is "Yes"  
unit

Plant Name (from Step 1)  
Crystal River

#### Standard Requirements

#### Permit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, Rules 62-214.320 and 330, F.A.C. in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the permitting authority; and
  - (ii) Have an Acid Rain Part.

#### Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

#### Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxide Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and



Plant Name (from Step 1)  
Crystal River

Recordkeeping and Reporting Requirements (cont.)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plan), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name W. Jeffrey Pardue, C.E.P., Director, Environmental Services Dept.

Signature 

Date 12/14/95

EP 5 (optional)  
on the source AIRS  
FINDS identification  
numbers, if known

AIRS
FINDS

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of: )  
 )  
Petition for Reduction in )  
Semiannual Particulate )  
Emissions Compliance Testing, ) OGC File No. 86-1576  
Crystal River Unit No.1; )  
Florida Power Corporation )  
 )  
Petitioner. )  
\_\_\_\_\_ )

ORDER

On February 18, 1986, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel steam generating unit:

Crystal River Unit No.1

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since February 18, 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing is GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1986 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from

meet either the particulate standard or the 40% opacity standard in the future shall constitute grounds for revocation of this authorization.

Persons whose substantial interests are affected by the above proposed agency action have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests will be affected by any decision of the Department have the right to intervene in the proceeding. A petition for the intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a

waiver of any right such person has to an administrative determination (hearing) under Section 120.57, Florida Statutes.

DONE AND ORDERED this 11<sup>th</sup> day of Dec, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to §120.52  
Florida Statutes, with the designated Depart-  
ment Clerk, receipt of which is hereby acknow-  
ledged.

C. Hutchins

Clerk

12-12-86


Date

VICTORIA J. TSCHINKEL  
Secretary

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida  
32399-2400  
Telephone (904) 488-9710

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing ORDER has been furnished by United States Mail to J.A. Hancock, Vice President, Fossil Operations, Florida Power Corporation, Post Office Box 14042, St. Petersburg, Florida 33733; on this 12 day of December, 1986, in Tallahassee, Florida.

  
E. Gary Early  
Assistant General Counsel

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida  
92399-2400  
Telephone (904)438-9730



RECEIVED

DEC 24 1997

DIVISION OF AIR  
RESOURCES MANAGEMENT

December 19, 1997

Mr. Howard Rhodes  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399

Dear Mr. Rhodes:

Re: Phase II NOx Compliance Plan

As required by 40 CFR 76.9, Florida Power Corporation (FPC) submits the attached Phase II NOx compliance plan for Crystal River Units 1, 2, 4, and 5. All four units are Group 1 boilers, and Units 2, 4, and 5 are early election units.

Please contact Mr. Mike Kennedy at (813) 866-4344 if you have any questions.

Sincerely,

W. Jeffrey Pardue, C.E.F.  
Designated Representative

Attachment

cc: Mr. James R. Stitt, Alternate Designated Representative  
Mr. Brian McLean, USEPA Acid Rain Division

# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is:



New



Revised

Page

1

of

5

## STEP 1

Indicate plant name, state, and ORIS code from NADS, if applicable.

Plant Name Crystal River

FL

State

ORIS Code 628

## STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADS, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	ID#	ID#	ID#	ID#	ID#
1	2	4	5		
Type	Type	Type	Type	Type	Type
T	T	DBW	DBW		

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

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(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

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☐

(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)

☐
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(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)

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(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)

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(f) Standard annual average emission limitation of 0.58 lb/mmBtu (for cell burner boilers)

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(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)

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(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

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(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

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(j) NO<sub>x</sub> Averaging Plan (include NO<sub>x</sub> Averaging form)

☐
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☐

(k) Common stack pursuant to 40 CFR 76.17(a)(2)(iii)(A)

☐
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☐
☐

check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack



Plant Name (from Step 1) Crystal River

Page 2 of 3

STEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

g) Common stack pursuant to 40 CFR 5.17(a)(2)(i)(B) with NO<sub>x</sub> Averaging (check the NO<sub>x</sub> Averaging Plan box and include NO<sub>x</sub> Averaging Form)

☐ ☐ ☐ ☐ ☐ ☐

h) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (a)(2)

☐ ☐ ☐ ☐ ☐ ☐

i) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal Form as appropriate)

☐ ☐ ☐ ☐ ☐ ☐

j) Petition for AEL Demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

☐ ☐ ☐ ☐ ☐ ☐

k) Repowering extension plan approved or under review

☐ ☐ ☐ ☐ ☐ ☐

## STEP 3

Read the standard requirements and identification, enter the name of the designated representative, sign and date.

## Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 75.5(e)(1)(i)). These requirements are listed in this source's Acid Rain Part of its Title V permit.

## Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 75.5(a)(2) except as provided under 40 CFR 75.5(e)(3)(iii).

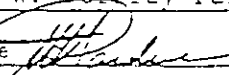
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 75.5 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2006 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 75.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2006 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 75.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 75.7.

STEP 3, cont'd.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	W. Jeffrey Pardue, C.E.P.	
Signature		Date 12/19/97



Florida  
Power  
CORPORATION

## INTEROFFICE CORRESPONDENCE

Environmental & Licensing Affairs H2G

231-4491

OCax

LAC

Txxxx

SUBJECT: See Below

TO: J. H. Lander  
Ed Carnahan  
— W. E. Dudley  
H. D. Douglas

DATE: November 21, 1990

Attached is a copy of the final Best Management Plan for fugitive emissions at the Crystal River site. This plan was developed to provide guidance to site management with respect to controlling fugitive emissions. Control of fugitive emissions is required as part of the PSD Air Construction permit for the helper cooling towers (A/C09-162037).

Implementation of the plan including any administrative procedures which are necessary is the responsibility of site management. Please contact me at 231-4387 if you have any questions.

W. Jeffrey Pardue

Attachment

cc: P. K. Blizzard - w/o attachment  
R. C. Bonner - w/o attachment  
D. A. Shantz - w/o attachment  
S. H. Osbourn - w/attachment  
R. O. Frazee - w/attachment

PS: SUPPLEMENT

File: CRSA112  
CRNA112

BEST MANAGEMENT PLAN  
FOR CONTROL OF FUGITIVE DUST  
AT FPC'S CRYSTAL RIVER PLANT

Prepared For:

Florida Power Corporation  
3201 34th Street South  
St. Petersburg, Florida 33711

Prepared By:

KEN Engineering and Applied Sciences, Inc.  
1034 NW 57th Street  
Gainesville, Florida 32605

November 1990  
90062B1

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## SUMMARY OF BEST-MANAGEMENT PLAN (Page 1 of 2)

Plant Area	Control Method		
	Level 1	Level 2	Level 3
<u>CR 1/2 Coal Storage Pile</u>			
Active Coal Pile	Water once per hour	Water twice per hour	Apply chemical dust control agent
Inactive Coal Pile	Water with natural drying to form crust	Apply chemical binder, sealer, or crusting agent	- -
<u>CR 1/2 Ash Storage Areas</u>			
Active Ash Area	Water as needed	Apply chemical dust control agent	Cease all activities
Inactive Ash Area	Water with natural drying to form crust	Apply chemical binder, sealer, or crusting agent	- -
<u>CR 4/5 Coal Storage Pile</u>			
Active Coal Pile	Water once per hour	Water twice per hour	Apply chemical dust control agent
Inactive Coal Pile	Water with natural drying to form crust	Apply chemical binder, sealer, or crusting agent	- -
<u>CR 4/5 Ash Storage Areas</u>			
Active Ash Area	Water as needed	Apply chemical dust control agent	- -
Inactive Ash Area	Water with natural drying to form crust	Apply chemical binder, sealer, or crusting agent	- -

SUMMARY OF BEST MANAGEMENT PLAN (Page 2 of 2)

Plant Area	Control Method		
	Level 1	Level 2	Level 3
<u>Site Haul Roads</u>			
Unpaved Haul Road	Water as needed	Apply chemical dust control agent	Reduce or eliminate traffic on haul road
Paved Haul Road	Water as needed	Use street vacuum to remove particulate matter from roadway cover trucks to prevent dust emissions	Reduce or eliminate traffic on haul road
<u>Coal Transfer Points</u>			
CR 1/2, CR 4/5	Operate baghouses on transfer points	Apply water at transfer points	Apply chemical dust control agent
<u>Ash Transfer Silos</u>			
CR 1/2, CR 4/5	Evaluate and implement maintenance measures to achieve control if necessary	Apply water at transfer point	Apply chemical dust control agent at transfer point
<u>Aardelita Plant</u>			
Product Loadout, Storage and Loading	Operate water spray system	Manually apply additional water as needed	Apply chemical dust control agent at transfer points.



## 1.0 INTRODUCTION

### 1.1 NEED FOR A BEST MANAGEMENT PLAN

Florida Power Corporation (FPC) was recently granted a construction permit by the Florida Department of Environmental Regulation (FDER) which allows FPC to construct helper cooling towers at the Crystal River power plant. The construction permit, permit No. AC09-162037, was issued by FDER on August 29, 1990. Specific Condition 3 of the permit requires that fugitive dust emissions generated at the Crystal River power plant be controlled as described in the permit application. The fugitive dust sources identified in the application and the required controls are listed in Table 1-1. This information was contained in reports prepared by KEN Engineering and Applied Sciences, Inc. (KEN) (KEN, 1989a, 1989b, 1990), and submitted as part of the permit application.

In addition, Specific Condition 7 of the permit requires that FPC comply with all applicable provisions of Chapter 17-2, Florida Administrative Code (F.A.C.). One important provision of these rules is that reasonable precautions be taken to prevent emissions of fugitive dust (Chapter 17-2.600, F.A.C.). Reasonable precautions are stated to include such control measures as enclosures, watering, paving, etc. but are not limited to these control measures.

FPC must demonstrate compliance with the above described permit conditions. Because of the general nature of the permit conditions, and the potential uncertainty in determining the extent of controls necessary to comply with the requirements under all possible operating conditions, a plan is needed which defines procedures which plant personnel can follow. The plan should also define recordkeeping requirements, since the air pollution control agencies will desire documentation on specific reasonable precautions which have been implemented to minimize fugitive dust emissions. This plan is referred to as a Best Management Plan (BMP) for the control of fugitive dust emissions at the Crystal River power plant.

Table 1-1. Fugitive Dust Control Methods Presented in Construction Permit Application for FPC Crystal River Helper Cooling Towers

Source	Activity	Control Method	Estimated Control Efficiency (%)
<u>CR 1/2 Coal Storage Pile</u>			
Active Coal Pile	Wind erosion	Water	80
	Vehicular traffic	Water	80
Inactive Coal Pile	Wind erosion	Crusting agent	95
<u>CR 1/2 Ash Storage Areas</u>			
Active Ash Area	Wind erosion	Water	80
	Backhoe to truck transfer	None	0
Inactive Ash Area	Wind erosion	Crusting agent	95
<u>CR 4/5 Coal Storage Pile</u>			
Active Coal Pile	Wind erosion	Water	90
	Vehicular traffic	Water	80
Inactive Coal Pile	Wind erosion	Crusting agent	95
<u>CR 4/5 Ash Storage Area</u>			
Active Ash Area	Wind erosion	Crusting agent	95
	Vehicular traffic	Chemical stabilizer	95
Inactive Ash Area	Wind erosion	Chemical wetting agent	90
<u>Site Haul Roads</u>			
Unpaved Roads	Vehicular traffic	Chemical stabilizer	95
<u>Coal Transfer Points</u>			
CR 1/2, CR 4/5	Transfer points	Enclosure	90
<u>Ash Transfer Silos</u>			
CR 1/2, CR 4/5	Transfer points	Enclosure	90
<u>Ardelita Plant</u>			
	Transfer points/ storage pile	Water spray	90

## 1.2 OBJECTIVES OF THE BMP

Plant operating personnel at Crystal River will be responsible for implementing measures to comply with the permit conditions related to fugitive dust control. However, these personnel are generally not trained in air pollution control or in identifying air pollution problems. As a result, plant personnel need a simple, straight forward methodology for identifying when action is needed to adequately control fugitive dust emissions. The objective of the BMP is to identify specific indicators plant personnel can utilize to determine the necessity for further control, and to then provide a hierarchy of control options which can be implemented to comply with the intent of the permit conditions.

## 1.3 CONTENTS OF THE BMP

The BMP is divided into several sections, each of which deals with a specific section within the Crystal River plant. These include the coal and ash storage piles, ash loading system, site haul roads, and coal transfer system. Since these systems for Crystal River Units 1 and 2 are generally separated from the Units 4 and 5 systems, plant sections for each set of units are addressed separately. The Progress Materials Aardalite Plant, which is located on the Crystal River site, is also addressed in the BMP.

For each plant section, air pollution indicators are identified to allow plant personnel to determine if an air emission problem exists. Secondly, several fugitive dust control measures are presented to allow personnel to implement adequate control measures to mitigate the problem. These are presented in order of increasing control effectiveness. This will allow the personnel to first implement the least effective (and least costly) control alternative, but to proceed to more effective control options if necessary to mitigate the problem. Lastly, recordkeeping requirements are identified to provide documentation that FPC is applying reasonable precautions to prevent fugitive dust emissions, and is complying with the intent of the construction permit.

#### 1.4 DEFINITIONS

In order to understand and implement the EMP for fugitive dust control, it is first necessary to define certain terms used in the EMP.

Fugitive dust -- emissions of particulate matter (dust) which originate from an unconfined source, such as a storage pile, roadway, transfer point, etc.

Visible emissions (VE) -- emissions of air pollutants which are visible to the naked eye. Visible emissions may range from slightly perceptible to a very dark, black color. Generally, the level of visible emissions correlates with the level of fugitive dust emissions.

## 2.0 CR 1/2 COAL STORAGE PILE

### 2.1 DESCRIPTION OF SOURCES

Sources of fugitive dust emissions associated with the CR 1/2 coal storage area consists of the following:

1. Active coal storage pile
  - a. Emissions due to wind erosion
  - b. Emissions due to mobile traffic
2. Inactive coal storage pile
  - a. Emissions due to wind erosion
  - b. Emissions due to vehicular traffic

Active storage pile areas are considered to be those areas of the pile which have been disturbed within the previous 30 days. These areas are more likely to result in fugitive dust emissions due to wind erosion and can also experience mobile (bulldozer) traffic with associated fugitive dust emissions. Fugitive dust emissions can range from none or little to heavy, depending on weather conditions and activity level in the pile area.

Inactive storage pile areas are those areas of the pile which have not been disturbed during the last 30 days. These areas are likely to develop natural crusting and may exhibit little or no fugitive dust emissions. Heavy dust emissions would only occur under extreme meteorological conditions, i.e., high wind speeds and dry conditions. Rainfall events can cause the inactive storage pile to erode, requiring mobile equipment to rework the pile. This traffic can also generate fugitive dust emissions.

### 2.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the active or inactive coal storage piles. Visible emissions will be caused either by wind erosion or due to mobile or vehicular traffic.

### 2.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed coming from the Units

1/2 coal storage pile area. It should first be verified that the emissions are indeed a result of wind erosion or mobile/vehicular traffic in the storage pile area. The control measures are listed in order of implementation. Level 1 control should be implemented first. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

Active coal pile

Level 1 - Water once per hour

Level 2 - Water twice per hour

Level 3 - Apply chemical dust control agent (i.e., agglomerating agent, surfactant etc.)

Inactive coal pile

Level 1 - Water followed by natural drying to form crust on pile

Level 2 - Apply chemical binder, sealer, or crusting agent

### 3.0 CR 1/2 ASH STORAGE AREAS

#### 3.1 DESCRIPTION OF SOURCES

Sources of fugitive dust emissions associated with the CR 1/2 ash storage piles consist of the following:

1. Active bottom ash storage area (north or south)
  - a. Emissions due to wind erosion
  - b. Emissions due to vehicular traffic
2. Inactive bottom ash storage areas (north and south)
  - a. Emissions due to wind erosion

Generally at CR Units 1/2, there is an area within one of the two bottom ash storage areas that is active (i.e., bottom ash is being piled and transferred). These areas are likely to result in fugitive dust emissions due to wind erosion, vehicular traffic and material handling activities. Fugitive emissions can range from none or little to heavy, depending on weather conditions and activity level in the pile area.

Inactive bottom ash storage areas are the two bottom ash ponds designated North and South. These areas are likely to develop natural crusting and may exhibit little or no fugitive dust emissions. Heavy dust emissions would only occur under extreme meteorological conditions, i.e., high wind speeds and dry conditions.

#### 3.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the active or inactive ash storage areas. Visible emissions will be caused either wind erosion, vehicular traffic, or ash handling activities (i.e., front end loader, shovel, etc).

#### 3.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed coming from the Units 1/2 ash storage area. It should first be determined the exact source of the emissions, i.e., wind erosion, vehicular traffic, or material handling

device. The selected control measure should then be applied as appropriate to control the identified source. The control measures are listed in order of implementation. Level 1 control should first be implemented. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

Active ash area

Level 1 - Water as needed

Level 2 - Apply chemical dust control agent (i.e., agglomerating agent, surfactant, etc.)

Level 3 - Cease all activities

Inactive ash area

Level 1 - Water followed by natural drying to form crust on pile

Level 2 - Apply chemical binder, sealer, or crusting agent



#### 4.0 CR 4/5 COAL STORAGE PILE

##### 4.1 DESCRIPTION OF SOURCES

Sources of fugitive dust emissions associated with the CR 4/5 coal storage area consists of the following:

1. Active coal storage pile
  - a. Emissions due to wind erosion
  - b. Emissions due to mobile traffic
2. Inactive coal storage pile
  - a. Emissions due to wind erosion
  - b. Emissions due to vehicular traffic

Active storage pile areas are considered to be those areas of the pile which have been disturbed within the previous 30 days. These areas are more likely to result in fugitive dust emissions due to wind erosion, and can also experience vehicular traffic with the associated fugitive emissions. Fugitive emissions can range from none or little to heavy, depending on weather conditions and activity level in the pile area.

Inactive storage pile areas are those areas of the pile which have not been disturbed during the last 30 days. These areas are likely to develop natural crusting and may exhibit little or no fugitive dust emissions. Heavy dust emissions would only occur under extreme meteorological conditions, i.e., high wind speeds and dry conditions. Rainfall events may cause the inactive coal pile to erode, requiring mobile/vehicular traffic on the pile. These activities may also generate fugitive dust emissions.

##### 4.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the active or inactive coal storage piles. Visible emissions will be caused either by wind erosion or due to mobile/vehicular traffic.

##### 4.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed coming from the Units

11/08/90

4/5 coal storage pile area. It should first be verified that the emissions are indeed a result of wind erosion or mobile/vehicular traffic in the storage pile area. The control measures are listed in order of implementation. Level 1 control should be implemented first. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

Active coal pile

Level 1 - Water once per hour

Level 2 - Water twice per hour

Level 3 - Apply chemical dust control agent (i.e., agglomerating agent, surfactant, etc.)

Inactive coal pile

Level 1 - Water followed by natural drying to form crust on pile

Level 2 - Apply chemical binder, sealer, or crusting agent

## 5.0 CR 4/5 ASH STORAGE AREAS

### 5.1 DESCRIPTION OF SOURCES

Sources of fugitive dust emissions associated with the CR 1/2 ash storage piles consist of the following:

1. Active ash storage area
  - a. Emissions due to wind erosion
  - b. Emissions due to vehicular traffic
2. Inactive ash storage area
  - a. Emissions due to wind erosion
  - b. Emissions due to vehicular traffic

Generally at CR Units 4/5, there is an area of about 10 acres in size where ash is exposed to the atmosphere. The remaining ash storage area has been capped and sealed. Of the exposed area, the majority is in an inactive state (i.e., no active movement of ash). The active area is likely to result in fugitive dust emissions due to wind erosion, vehicular traffic, and material moving activities. Potential fugitive emissions are greater than the coal storage piles because the ash has a smaller particle size and generally contains less moisture compared to coal. Fugitive emissions can range from none or little to heavy, depending on weather conditions and activity level in the pile area.

The inactive portion of the ash storage area remains undisturbed for long periods of time (i.e., several weeks or more). These areas are likely to develop natural crusting and may exhibit little or no fugitive dust emissions. However, vehicular traffic may frequently travel over the inactive ash area, creating fugitive dust emissions. Due to the fine, dry nature of the ash, heavy dust emissions can occur at any time under dry or windy conditions.

## 5.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the active or inactive ash storage areas. Visible emissions will be caused by either wind erosion, vehicular traffic, or ash handling activities (i.e., front end loader, shovel, etc.).

## 5.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed emanating from the Units 4/5 ash storage area. It should first be determined the exact source of the emissions, i.e., wind erosion, vehicular traffic, or material handling device. The selected control measure should then be applied as appropriate to control the identified source. The control measures are listed in order of implementation. Level 1 control should be implemented first. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

### Active ash area

Level 1 - Water as needed

Level 2 - Apply chemical dust control agent (i.e., agglomerating agent, surfactant, etc.)

### Inactive ash area

Level 1 - Water followed by natural drying to form crust on pile

Level 2 - Apply chemical binder, sealer, or crusting agent

11/08/90

## 6.0 SITE HAUL ROADS

### 6.1 DESCRIPTION OF SOURCE

Crystal River plant haul roads include both unpaved linerock roads and paved roads. Fugitive dust emissions are due to vehicular traffic over these roadways. In the case of unpaved roads, the road surface itself is soil material, which can become airborne due to winds or vehicular traffic. Paved roads can also have soil, coal, or ash deposited on the surface, which then can become airborne. Fugitive emissions can range from none or little to heavy, depending on weather conditions and activity level on the roadway.

### 6.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the roadway.

### 6.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed emanating from site haul roads. The control measures are listed in order of implementation. Level 1 control should be implemented first. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

#### Unpaved haul road

Level 1 - Water as needed

Level 2 - Apply chemical dust control agent (i.e., agglomerating agent, surfactant, etc.)

Level 3 - Reduce or eliminate traffic on haul road, where possible

#### Paved haul road

Level 1 - Water as needed

Level 2 - Apply chemical dust control agent

Level 3 - Use street vacuum to remove particulate matter from roadway. In addition, cover trucks appropriately to prevent dust emissions from trucks

Level 4 - Reduce or eliminate traffic on haul road

## 7.0 COAL TRANSFER POINTS

### 7.1 DESCRIPTION OF SOURCES

Sources of fugitive dust emissions associated with the coal transfer points at the Crystal River power plant consist of a clamshell hopper for barge unloading, railcar dump facility, conveyor transfer points, coal crushers, and stacker/reclaimers. Most of the coal transfer points are enclosed and also have vents to baghouses. The baghouses are generally not operated since plant personnel have not observed appreciable visible emissions from these sources. Fugitive dust emissions are normally negligible from these sources due to the wet nature of the coal. However, fugitive emissions could occur due to dry coal and/or windy conditions.

### 7.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the coal handling or transfer points.

### 7.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed emanating from the coal transfer points. The control measures are listed in order of implementation. Level 1 control should first be implemented. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

Level 1 - Operate baghouses already installed on transfer points

Level 2 - Apply water at transfer points

Level 3 - Apply chemical dust control agent (i.e., agglomerating agent, surfactant, etc.) at transfer points

## 8.0 ASH TRANSFER SILOS

### 8.1 DESCRIPTION OF SOURCES

Sources of fugitive dust emissions associated with the ash transfer points at the Crystal River power plant are the fly ash silo to truck transfer points located at both CR 1/2 and CR 4/5. These transfer points consist of a continuous drop operation which are controlled by wetting the ash and/or applying a surfactant, and utilizing a chute or sock for loading from silo to truck. Fugitive dust emissions are normally negligible from these sources due to the enclosed nature of the operation. However, fugitive emissions could occur due to the dry nature of the fly ash or due to equipment malfunction (i.e., faulty operation of water/surfactant applicator).

### 8.2 CONDITIONS REQUIRING ACTION

Action should be taken whenever visible emissions are observed from the fly ash coal transfer points.

### 8.3 MITIGATIVE MEASURES

The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed emanating from the fly ash transfer points. The control measures are listed in order of implementation. Level 1 control should first be implemented. If Level 1 control does not prevent the visible emissions, then Level 2 control should be implemented, and so on, until adequate control is achieved (i.e., no visible emissions).

Level 1 - Evaluate and implement, if necessary, maintenance measures to achieve dust control

Level 2 - Apply water at transfer points

Level 3 - Apply chemical dust control agent (i.e., surfactant, etc.) at transfer points

## 9.0 PROGRESS MATERIALS AARDELITE PLANT

### 9.1 DESCRIPTION OF SOURCES

The Progress Materials Aardelite Plant is an independently operated facility located on the Crystal River site. This facility has current air operating permits issued by FDER. The facility receives fly ash from FPC Crystal River Units 1 and 2 fly ash storage silo and mixes the ash with limestone to form solid pellets. These pellets are then transported by truck to offsite facilities. The fugitive dust sources associated with this facility include the following:

1. Conveyor stacker to storage pile,
2. Product storage pile,
3. Vehicular traffic (front-end loader),
4. Front-end loader to hopper transfer point,
5. Hopper to belt transfer point, and
6. Belt to truck transfer point.

A water spray system is installed on the conveyor stacker as a fugitive dust control measure.

### 9.2 CONDITIONS REQUIRING ACTION

The air operating permit which covers the fugitive dust sources at the Aardelite plant (A009-159886) requires that additional work practices and/or control measures be implemented whenever visible emissions are observed from the sources. The following identifies the fugitive dust control measures which should be implemented whenever visible emissions are observed from the Aardelite fugitive dust sources. Level 1 control should be implemented first, followed by Level 2, etc., until adequate control is achieved (i.e., no visible emissions).

Level 1--Operate water spray system installed on product storage and loading system.

Level 2--Apply additional water on storage pile or transfer points as needed. Water hose with spray head or similar device to be used.

Level 3--Apply chemical dust control agent (i.e., surfactant) at transfer points or on storage pile.



#### 10.0 RECORDKEEPING REQUIREMENTS

A log should be kept of all action taken to control fugitive dust emissions. For each event, the following should be recorded:

Date

Time

Location of visible emissions

Apparent cause of visible emissions

Descriptor of intensity of visible emissions

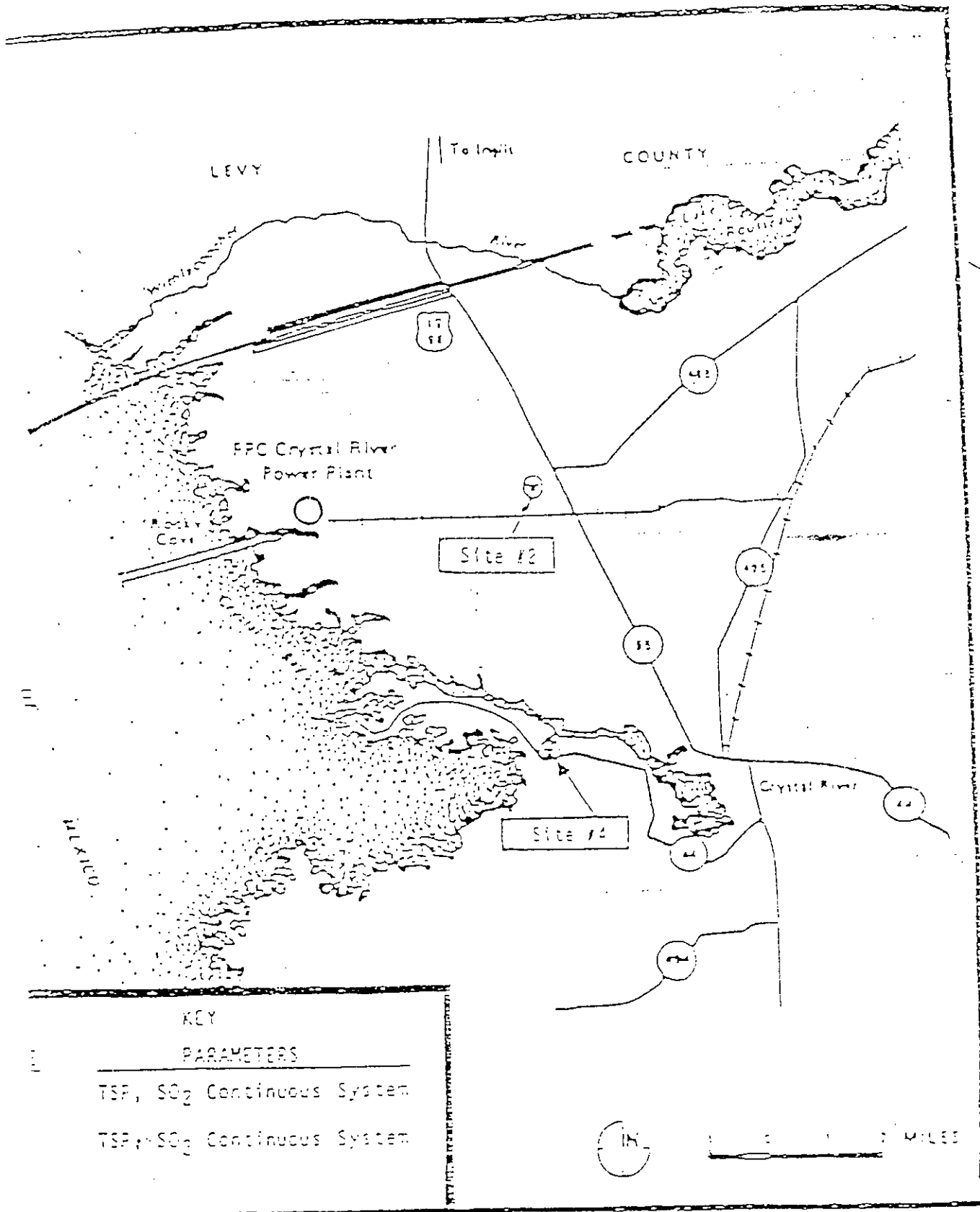
Action taken to mitigate visible emissions

Success of action in reducing/eliminating the visible emission

#### REFERENCES

- KEN Engineering and Applied Sciences, Inc. (KEN). 1989a. Particulate Matter Air Quality Impact Assessment--Florida Power Corporation Crystal River Plant. Gainesville, Florida.
- KEN Engineering and Applied Sciences, Inc. (KEN). 1989b. Letter to Mr. Eustice Farnelle, Environmental and Licensing Affairs, Florida Power Corporation, April 27, 1989. Gainesville, Florida.
- KEN Engineering and Applied Sciences, Inc. (KEN). 1990. Particulate Matter Air Quality Impact Assessment for Proposed Helper Cooling Towers for Units 1, 2, and 3, Crystal River Plant. Gainesville, Florida.

FIGURE A



FLORIDA POWER CORPORATION, AMBIENT AIR  
MONITORING LOCATIONS, CRYSTAL RIVER, FLORIDA

FLORIDA POWER  
CORPORATION

Acid Rain Part- Page 1

## Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: ☐ New ☒ Revised

### STEP 1

Identify the source by  
plant name, State, and  
ORIS code

Plant Name	Crystal River	State	FL	ORIS Code	628
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### STEP 2

Enter the unit ID# for every  
Acid Rain unit at the Acid  
Rain source in column "a."  
For new units, enter the  
requested information in  
columns "c" and "d."

a	b	c	d
Unit ID#	Unit will hold allowances in accordance with 40 CFR 72.3(c)(1)	New Units  Commence Operation Date	New Units  Monitor Certification Deadline
1	Yes		
2	Yes		
4	Yes		
5	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Plant Name (from Step 1) **Crystal River**

**STEP 3**  
**Read the standard**  
**requirements**

**Acid Rain Part Requirements**

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 82-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 82-214.320, F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and
  - (ii) Have an Acid Rain Part.

**Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 82-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

**Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Excess of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.8(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.8(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**Nitrogen Oxides Requirements** The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. In accordance with Rule 82-214.350, F.A.C., provided that the certificate and documents shall be retained on site at the source beyond such 3-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information. In accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and

Acid Rain Part - Page 3

STEP 3,  
Cont'd.

Plant Name (from Step 1) Crystal River

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit of the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 78.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 78.18, 78.17, and 78.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not effect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudency review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or

(5) Interfering with or impeding any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the  
certification  
statement, sign,  
and date

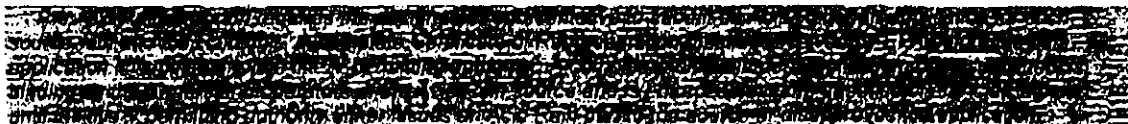
Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	J. Michael Kennedy
Signature	<i>J. Michael Kennedy</i>
Date	6/29/04

Acid Rain Part Instructions - Page 1

## Acid Rain Program Instructions for Acid Rain Part Application (40 CFR 72.30 - 72.31 and Rule 62-214.320, F.A.C.)



Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the title V permitting authority.

**STEP 1** Use the plant name and ORIS Code listed on the Certificate of Representation for the plant. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If no code has been assigned or if there is uncertainty regarding what the code number is, contact EIA at (202) 287-1730 (for ORIS codes), or (202) 287-1927 (for facility codes).

**STEP 2** For column "a," identify each Acid Rain unit at the Acid Rain source by providing the appropriate unit identification numbers, consistent with the unit identification numbers entered on the Certificate of Representation and with unit identification numbers used in reporting to DOE and/or EIA. For new units without identification numbers, owners and operators may assign such numbers consistent with EIA and DOE requirements.

For columns "c" and "d," enter the commence operation date(s) and monitor certification deadline(s) for new units in accordance with 40 CFR 72.2 and 75.4, respectively.

### Submission Deadlines

For new units, an initial Acid Rain part application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid rain part renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

### Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.

Page 1

# Florida Department of Environmental Protection

## Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is:

☐ New ☒ Revised

Page 1 of 2

STEP 1 Indicate plant name, state, and ORIS code from NADB, if applicable.	Plant Name Crystal River Plant	State FL	ORIS Code 826
STEP 2	Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom well-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.		

ID# 1	ID# 2	ID# 4	ID# 5	ID#	ID#
Type T	Type T	Type DBW	Type DBW	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom well-fired boilers)

☐ ☐ ☐ ☐ ☐ ☐

(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

☐ ☐ ☐ ☐ ☐ ☐

(c) EPA-approved early election plan under 40 CFR 76.8 (through 12/31/07 (also indicate above emission limit specified in plan)

☐ ☐ ☐ ☐ ☐ ☐

(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom well-fired boilers)

☐ ☐ ☐ ☐ ☐ ☐

(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)

☐ ☐ ☐ ☐ ☐ ☐

(f) Standard annual average emission limitation of 0.66 lb/mmBtu (for cell burner boilers)

☐ ☐ ☐ ☐ ☐ ☐

(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)

☐ ☐ ☐ ☐ ☐ ☐

(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

☐ ☐ ☐ ☐ ☐ ☐

(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

☐ ☐ ☐ ☐ ☐ ☐

(j) NO<sub>x</sub> Averaging Plan (Include NO<sub>x</sub> Averaging form)

☒ ☒ ☒ ☒ ☐ ☐

(k) Common stack pursuant to 40 CFR 76.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)

☐ ☐ ☐ ☐ ☐ ☐

(l) Common stack pursuant to 40 CFR 76.17(a)(2)(i)(B) with NO<sub>x</sub> Averaging (check the NO<sub>x</sub> Averaging Plan box and include NO<sub>x</sub> Averaging Form)

☐ ☐ ☐ ☐ ☐ ☐



Page 2

Crystal River Plant
Plant Name (from Step 1)

Page 2 of 2

STEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(ii)(B), or (b)(2)

☐ ☐ ☐ ☐ ☐ ☐

(n) AEL (Include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

☐ ☐ ☐ ☐ ☐ ☐

(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

☐ ☐ ☐ ☐ ☐ ☐

(p) Repowering extension plan approved or under review

☐ ☐ ☐ ☐ ☐ ☐

STEP 3

Read the standard requirements and certification, enter the name of the designated representative, sign and date.

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.8 (consistent with 40 CFR 76.6(e)(1)(i)). These requirements are listed in this source's Acid Rain Part of its Title V permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.6(a)(2) except as provided under 40 CFR 76.6(e)(3)(ii).

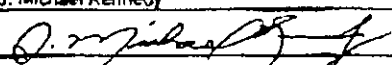
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.6 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

STEP 3, cont'd.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	J. Michael Kennedy
Signature	
Date	6/29/04

Page 1

## Florida Department of Environmental Protection

### Instructions for Phase II NO<sub>x</sub> Compliance Plan (40 CFR 76.9) and Phase II NO<sub>x</sub> Averaging Plan (40 CFR 76.11)

The U.S. Environmental Protection Agency has promulgated regulations designed to substantially reduce the annual emissions of nitrogen oxides (NO<sub>x</sub>) from coal-fired electric utilities. The NO<sub>x</sub> Emission Reduction regulations are found at 40 CFR part 76 and apply to each existing coal-fired utility unit that is subject to sulfur dioxide (SO<sub>2</sub>) emission reduction requirements under Sections 404, 405, or 409 of the Clean Air Act. Under 40 CFR 76.9 and Rules 62-214.320 and 62-214.330, F.A.C., the owner or operator of each affected unit subject to 40 CFR part 76 must include a compliance plan for NO<sub>x</sub> emissions in the Acid Rain Part application for that unit. The designated representatives (DRs) of Phase I and Phase II NO<sub>x</sub>-affected units with Group 1 or Group 2 boilers must submit an initial Phase II NO<sub>x</sub> compliance plan to the Department of Environmental Protection not later than January 1, 1998. A Group 1 boiler is a tangentially fired boiler or a dry bottom wall-fired boiler. A Group 2 boiler is a cell burner boiler, cyclone boiler, vertically fired boiler, or a wet bottom boiler. Once the Department receives the Phase II NO<sub>x</sub> compliance plans, it will in turn review them and incorporate approved plans into the Phase II Acid Rain Parts of the Title V permits issued by the Department to Phase II affected sources.

#### General Instructions

- (1) Please type or print in black ink.
- (2) NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 233-9620. This data file is in dBase format for use on an IBM-compatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS code, and boiler ID#(s) listed on the Certificate of Representation for the affected source.
- (3) If more space is needed, photocopy the pertinent page. When you have completed the form, indicate the page order and total number of pages (e.g., 1 of 4, 2 of 4, etc.) in the boxes in the upper right hand corner of each page.
- (4) Submit one complete set of all forms with original signatures to:

(a) The Department of Environmental Protection, Division of Air Resources Management, MS 5500, 2600 Blair Stone Road, Tallahassee, Florida 32389-2400 (for NO<sub>x</sub> Averaging Plans, a copy of the plan must be submitted to any other title V permitting authority with jurisdiction over any of the units in the plan).

and

One copy to:

(b) U.S. Environmental Protection Agency  
Acid Rain Program (6204J)  
Attn: Phase II NO<sub>x</sub>  
401 M St., SW  
Washington, DC 20460

- (5) For assistance, call the Acid Rain Hotline at (202) 233-9620.

#### NO<sub>x</sub> Compliance Options

##### STEP 2

##### General

Indicate a proposed method of compliance with the NO<sub>x</sub> emissions requirements for each unit at the source affected for NO<sub>x</sub> during Phase II. A Phase II NO<sub>x</sub> compliance plan must account for each year the Phase II acid rain permit will be effective. Further, a NO<sub>x</sub> compliance plan is in effect only through the term of the Acid Rain Part covering the NO<sub>x</sub>-affected units. A new NO<sub>x</sub> compliance plan must be

submitted when an acid rain permit renewal application is due.

##### NO<sub>x</sub>-affected Units

To determine if an affected unit subject to Acid Rain SO<sub>2</sub> requirements is also subject to NO<sub>x</sub> emission limitations, see 40 CFR 76.1, the definitions at 40 CFR 76.2, and the emission limitations at 40 CFR 76.5, 76.6, and 76.7. Most existing coal-fired units that are subject to Acid Rain SO<sub>2</sub> requirements and that have a Group 1 or Group 2 boiler are also subject to the NO<sub>x</sub> emission limitations under 40 CFR part 76.

Page 2

#### Phase I Group 1 Boilers

Compliance options (a) and (b) are standard annual emission limitations, one of which may be selected for a Phase I Group 1 boiler. The limits also apply to Phase II Group 1 boilers that are covered by an early election plan previously approved by U.S. EPA.

#### Early Election

Compliance option (c), NO<sub>x</sub> early election, is available only to Phase II Group 1 boilers with early election plans submitted by January 1, 1997 and approved by U.S. EPA. All such plans terminate no later than December 31, 2007. DRs with NO<sub>x</sub> early election units must select option (c) and either (a) or (b), the Phase I Group 1 standard emissions limit specified for the unit in the plan. If the termination date of the plan will be prior to the expiration date of the acid rain permit covering an early election unit, the DR must indicate an additional NO<sub>x</sub> compliance option that will apply to the unit beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (c) and either (a) or (b), as well as the additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option. For early election units in a common stack, see also the instructions under Common Stacks.

#### Phase II Group 1 Boilers

Compliance options (d) and (e) denote standard annual emission limitations, one of which may be selected for a Phase II Group 1 boiler.

#### Phase II Group 2 Boilers

Compliance options (f) through (i) denote standard annual emission limitations, one of which may be selected for a Phase II Group 2 boiler.

#### NO<sub>x</sub> Averaging

Compliance option (j) denotes the annual emission limitation under a NO<sub>x</sub> averaging plan, which may be selected in lieu of a standard annual emission limit for Group 1 or Group 2 boilers with the same owner or operator and the same DR. See instructions below and include Phase II NO<sub>x</sub> averaging form.

#### Common Stacks

A unit that utilizes a common stack and is separately monitored for NO<sub>x</sub> (i.e., has its own NO<sub>x</sub> monitor and diluent monitor) is treated as the same as a unit that emits only through its own separate stack.

A unit (other than an early election unit) that utilizes a common stack and is not monitored separately must select one of the applicable common stack options. If the unit shares a common stack with other affected units and no non-affected units and if each of the units has a NO<sub>x</sub> emission limitation, three options

are available: comply with the most stringent NO<sub>x</sub> emission limitation applicable to any unit utilizing the common stack (option (k)); include the units in a NO<sub>x</sub> averaging plan (option (l)); or use an approved method for apportioning the combined NO<sub>x</sub> emission rate in the common stack (option (m)). If the unit shares a common stack with at least one other unit that does not have a NO<sub>x</sub> emission limitation or with at least one non-affected unit, you must use an approved method for apportioning the combined NO<sub>x</sub> emission rate (option (m)), unless, of course, the unit is separately monitored. An early election unit that utilizes a common stack, that is not monitored separately, and whose early election plan specifies option (k) or (m) for the unit, must select such option.

If an apportionment option is chosen, check, in addition to option (m), the box at Step 2 that indicates the applicable emission limitation and submit to U.S. EPA the documentation supporting apportionment with the monitoring plan submission.

#### Alternative Emissions Limitations

Compliance option (n) must be selected by a Phase II Group 1 or Group 2 boiler that is applying for an AEL demonstration period, or final AEL, starting in Phase II. Compliance option (n) must also be chosen by a boiler that is renewing for Phase II a final AEL approved by U.S. EPA (see Instructions accompanying Phase II AEL Demonstration Period, Final AEL Petition, and AEL Renewal forms and include appropriate form).

Compliance option (o) must be selected by a boiler that has applied to U.S. EPA for an AEL demonstration period or final AEL which is undergoing review by U.S. EPA. If a final AEL is subsequently approved by U.S. EPA, a revised Phase II NO<sub>x</sub> compliance plan must be submitted marking option (o) and attaching an AEL Renewal form. If an AEL demonstration period or final AEL is subsequently disapproved by U.S. EPA, a revised Phase II NO<sub>x</sub> compliance plan must be submitted indicating which Phase II NO<sub>x</sub> compliance option will be used by the boiler.

#### Repowering Extension Plans

Compliance option (p) must be selected by a boiler that is covered by either an approved repowering extension plan or a plan that is undergoing review. If a repowering extension plan undergoing review is subsequently disapproved, a revised Phase II NO<sub>x</sub> compliance plan must be submitted indicating which Phase II NO<sub>x</sub> compliance option will be used by the boiler. If the termination date of either the repowering extension plan undergoing review or the approved plan is prior to the expiration date of the acid rain permit covering the repowered (or replacement) boiler under the plan, the DR must

Page 3

indicate an additional NO<sub>x</sub> compliance option that will apply to the boiler beginning when the plan terminates through the date by which the acid rain

permit will expire. In such cases the DR must mark option (p), as well as additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option.

### NO<sub>x</sub> Averaging Plan

Under 40 CFR 76.11 any affected units under control of the same owner or operator and with the same designated representative may average their NO<sub>x</sub> emission rate, rather than each unit complying on an individual-unit basis with the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7. Units with no common owner or operator may not average their emissions. You may submit an averaging plan (or a revision to an approved averaging plan) with the appropriate title V permitting authority(s) at any time up to and including January 1 of the calendar year for which the averaging plan will become effective. If the plan is restricted to units located within a single permitting authority's jurisdiction, you may submit the plan at any time up to and including July 1 of the calendar year for which the plan will become effective.

#### STEP 1

Each unit identified for inclusion in the averaging plan in Phase II must be a Group 1 or Group 2 boiler subject to an emission limitation under 40 CFR 76.5, 76.6, or 76.7. Enter each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7 in column (a). If a unit with an alternative emission limitation demonstration period or a final alternative emission limitation under 40 CFR 76.10 participates in an averaging plan, enter the applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7, not the interim or alternative limit, in column (a).

For units utilizing a common stack that are averaging pursuant to 40 CFR 75.17(a)(2)(i)(B), the same alternative contemporaneous emission limitation must be entered in column (b) for each unit utilizing the common stack. Different annual heat input limits may be entered for these units in column (c). Units not utilizing the common stack may also be included in the averaging plan with the common stack units.

The annual heat input limit entered at column (c) will be a minimum limit if the value in column (b) is less than the value in column (a) for that unit. It will be a maximum limit if the value in column (b) is greater than the value in column (a). The values entered for

each unit at columns (b) and (c) must satisfy the formula at Step 2.

#### STEP 2

The entries in Step 2 must demonstrate that the Btu-weighted annual emission rate averaged over the units in the plan is less than or equal to the Btu-weighted annual average emission rate for the same units if they are each operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7. Use the equation that appears in Step 2 to demonstrate that the alternative contemporaneous annual emission limitations and annual heat input values assigned to the units in Step 1 satisfy this criterion. For units with an interim emission limitation or an alternative emission limitation, the applicable emission limitation for the equation shall equal the applicable emissions limitation under 40 CFR 76.5, 76.6, or 76.7.

#### STEP 3

The second option is included to avoid the need to submit identical plans each for a different year if you want each plan to be effective for only one year.

### Paperwork Burden Estimate

The burden on the public for collecting and reporting of information under this request is fixed per response indicated. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0268), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. Do not send your forms to these addresses; see paragraph (4) of the General Instructions on Page 1 for form submission information.

#### FORM

NO<sub>x</sub> Compliance Plan  
NO<sub>x</sub> Averaging Plan

#### HOURS

10  
200

## Florida Department of Environmental Protection

# Phase II NO<sub>x</sub> Averaging Plan

For more information, see instructions for DEP Form No. 62-210.900(1)(a)4, and refer to 40 CFR 76.11

This submission is: ☐ New ☒ Revised

### STEP 1

Identify the units participating in this averaging plan by plant name, state, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
Ashville	NC	1	0.46	0.49	17,726,520
		2	0.46	0.38	9,214,921
Cape Fear	NC	5	0.40	0.42	12,079,848
		6	0.40	0.48	13,308,578
H.F. Lee	NC	1	0.40	0.64	5,476,686
		2	0.46	0.65	5,185,839
		3	0.46	0.45	10,361,021

### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.44

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.44

≤

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i}$$

≤

$$\frac{\sum_{i=1}^n [R_{li} \times HI_i]}{\sum_{i=1}^n HI_i}$$

where,

- $R_{Li}$  = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;  
 $R_{li}$  = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;  
 $HI_i$  = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;  
 $n$  = Number of units in the averaging plan

Page 2

Plant Name (from Step 1)

STEP 3

Mark one of the two options and enter dates.

☒ This plan is effective for calendar year 2005 through calendar year 2009 unless notification to terminate the plan is given.

☐ Treat this plan as ☐ identical plans, each effective for one calendar year for the following calendar years: \_\_\_\_\_ and \_\_\_\_\_ unless notification to terminate one or more of these plans is given.

STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date. Special Provisions

Special Provisions

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO<sub>x</sub> under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
  - (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan.
  - (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

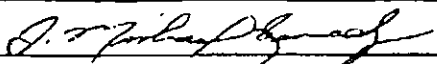
The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	J. Michael Kennedy
Signature	
Date	6/29/04

Page 3

Plant Name (from Step 1)

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STEP 1

Continue the identification of units from Step 1, page 1, here.

Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
Mayo	NC	1A	0.46	0.25	17,971,621
		1B	0.46	0.25	17,971,621
H. B. Robinson	SC	1	0.40	0.55	15,288,303
Roxboro	NC	1	0.48	0.32	19,259,322
		2	0.40	0.20	34,549,583
		3A	0.45	0.29	17,528,687
		3B	0.48	0.29	17,528,687
		4A	0.48	0.25	17,719,507
		4B	0.48	0.25	17,719,507
L. V. Sutton	NC	1	0.40	0.44	8,911,709
		2	0.48	0.78	7,601,410
		3	0.48	0.86	31,434,633
Weatherspoon	NC	1	0.46	0.93	3,124,890
		2	0.46	0.93	3,070,584
		3	0.40	0.55	5,550,670
Crystal River	FL	1	0.40	0.45	38,312,329
		2	0.40	0.45	41,934,711
		4	0.49	0.52	70,658,210
		5	0.48	0.52	70,208,037

06/29/2004 14:13 7278264216

ENV SERVICES

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Plant Name (from Step 1)

### STEP 1

Continue the identification of units from Step 1, page 1, here.

[illegible]



**Friday, Barbara**

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**To:** Waters, Jason; sosbourn@golder.com; dave.meyer@pgnmail.com; John\_Bunyak@nps.gov  
**Cc:** Halpin, Mike  
**Subject:** DRAFT Title V Permit Renewal #0170004-009-AV - Progress Energy Florida, Inc. - Crystal River Plant

Find attached the zip file for subject DRAFT Title V Permit Renewal for your information and files.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday  
Planner II  
Bureau of Air Regulation  
(850)921-9524  
[Barbara.Friday@dep.state.fl.us](mailto:Barbara.Friday@dep.state.fl.us)

10/1/2004