



February 26, 1998

Ms. Kathy Carter, Clerk Office of General Counsel Florida Department of Environmental Protection Room 638 3900 Commonwealth Blvd. Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 0170004-004-AV

On October 9, 1997, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. The Department previously agreed to grant an Order extending the time to file a petition until February 27, 1998. Mr. Scott Osbourn of my staff has had discussions with Mr. Scott Sheplak of the Department who agreed that an additional extension of time to discuss these issues is appropriate. Therefore, based upon the Department's concurrence and pursuant to Rules 62-103.050 and 28-106.111, Fla. Admin. Code, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing under Sections 120.569 and 120.57, Fla. Stat., up to and including March 31, 1998.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (813) 866-5158.

Sincerely.

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esa/

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC

BEST AVAILABLE COPY



August 27, 1998

Mr. Clair Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Re: Periodic Monitoring in Title V Permits: Heat Input Limits , 🔅

As you know, a meeting was held between the EPA, the Department and utility representatives at the Florida Electric Power Coordinating Group (FCG) offices on July 14, 1998. The purpose of the meeting was to discuss the periodic monitoring requirements of 40 CFR 70.6(a)(3)(i) as applied to Title V permits. The meeting presented an apportunity for all parties to represent their views, and it was clear that there remains considerable disagreement as to the proper application of the periodic monitoring guidance.

In addition to the July 14, 1998 meeting, FPC has also reviewed DEP's March 10, 1998 letter to EPA (Re: Proposed Changes to FPL Proposed Title V Permits to Satisfy EPA Objections). FPC has still not formalized its position on periodic monitoring, including all of the issues raised in the March 10, 1998 letter. However, the resolution outlined in the March 10th letter regarding heat input limitations appears to be reasonable and one that FPC is willing to accept. This resolution required adding a note to the "permitted capacity" condition for each Title V permit, and an explanation that regular record keeping is not required for fieat input. Specifically, the Department stated that they would add the following language to the statement of basis:

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 emissions limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. 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 process variables for emissions 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

8/31 Scott Steplak

Pls hardle. If

this is a problem, pls

advise Clair

By bord Cryshariver De Bary Turner Barton Sumanee Uoft Tizer Bay Mr. Fancy August 27, 1998 Page 2

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.

Also, the Department added the following language to each permit condition titled Permitted Capacity:

{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.}

Accordingly, FPC requests that this language regarding heat input be added to all of FPC's Title V permits currently being processed by the Department. FPC intends to notify the Department as soon as possible after formalizing its position on the remainder of periodic monitoring issues. If you should have any questions concerning the above, please do not hesitate to contact me at (727) 826-4258.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

cc: Robert Manning, HGS&S



Department of Environmental Protection

El Suec

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

Virginia B. Wetherell Secretary

P.E. Certification Statement

Permittee:

Florida Power Corporation Crystal River Plant Revised DRAFT Permit No.: 0170004-004-AV

Facility ID No.: 0170004

Project type: Revised Initial Title V Air Operation Permit

I HEREBY CERTIFY that the engineering features described in the above referenced application 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).

Scott M. Sheplak, P.H.

date

Registration Number: 0048866

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301

Telephone: 850/921-9532

Fax: 850/922-6979



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

September 25, 1998

Mr. W. Jeffrey Pardue Director, Environmental Services Department Florida Power Corporation 3201 34th Street South St. Petersburg, Florida 33711

Re:

Revised DRAFT Title V Permit No.: 0170004-004-AV

Crystal River Plant

Dear Mr. Pardue:

One copy of the DRAFT Title V Air Operation Permit for the Crystal River Plant west of U.S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County, is enclosed. The previous DRAFT Title V operation permit dated September 24, 1997, is withdrawn. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" must be published as soon as possible. This issue is important in order for you to receive your revised Title IV Acid Rain Part by January 1, 1999, for the inclusion of the Phase I/II NOx limitations pursuant to Rule 62-214.360(6), Florida Administrative Code. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. If you have any other questions, please contact Edward J. Svec at 850/921-8985.

Sincerely,

Chief

Bureau of Air Regulation

CHF/s

Enclosures

cc: Ms. Carla E. Pierce, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Gracy Danois, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

In the Matter of an Application for Permit by:

Florida Power Corporation 3201 34th Street South St. Petersburg, Florida 33711 Revised DRAFT Permit No.: 0170004-004-AV Crystal River Plant Citrus County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit (copy of Revised DRAFT Permit enclosed) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Florida Power Corporation, applied on June 14, 1996, to the permitting authority for a Title V air operation permit for the Crystal River Plant located west of U.S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County. The applicant submitted the Phase I/II NOx Acid Rain Compliance Plan on December 19, 1997. This permit incorporates the Phase I/II NOx standards into the Title IV Acid Rain Part pursuant to Rule 62-214.360(6), Florida Administrative Code (F.A.C.).

The permitting authority has permitting jurisdiction 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. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V air operation permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source 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.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), 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." The 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. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-110.106, F.A.C.

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The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the attached Title V Revised DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of the "<u>PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT</u>." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Revised DRAFT Permit, the permitting authority shall issue another Revised DRAFT Permit and require, if applicable, another Public Notice.

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 (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, 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 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;

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- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;
 - (f) A demand for relief.

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 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 will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
 - (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
 - (e) The type of action requested;
 - (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

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Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) 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 issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this 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.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

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CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the Revised DRAFT permit) and all copies were sent by certified mail before the close of business on 9998 to the person(s) listed:

W. Jeffrey Pardue, Florida Power Corporation

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the Revised DRAFT permit) were sent by U.S. mail on the same date to the person(s) listed:

Kennard Kosky, PE, Golder Associates. Scott Osbourn, Florida Power Corporation Bill Thomas, PE, FDEP, SWD

Clerk Stamp

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

(Clerk)

(Mate)

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V Revised DRAFT Permit No.: 0170004-004-AV
Crystal River Plant
Citrus County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Seminole Electric Cooperative, Inc. for the Crystal River Plant located west of U.S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County. This permit incorporates the Phase I/II NOx standards into the Title IV Acid Rain Part pursuant to Rule 62-214.360(6), Florida Administrative Code (F.A.C.). The applicant's name and address are: Florida Power Corporation, 3201 34th Street South, St. Petersburg, Florida 33711.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V Revised DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V Revised DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Revised DRAFT Permit, the permitting authority shall issue another Revised DRAFT Permit and require, if applicable, another Public Notice.

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 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, 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 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 applicable 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 of the Florida Administrative Code (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; 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 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, as well as the rules and statutes which entitle petitioner to relief; and
 - (f) A demand for relief.

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 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 is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) 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 issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this 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.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Telephone: 850/488-1344

Fax: 850/922-6979

Affected District/Local Program:

Department of Environmental Protection Southwest District Office 4807 Laurel Fair Circle Tampa, Florida 33619 Telephone: 813/744-6100

Fax: 813/744-6084

The complete project file includes the Revised DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/921-9532, for additional information.

Florida Power Corporation Crystal River Plant Facility ID No.: 0170004 Citrus County

Initial Title V Air Operation Permit Revised DRAFT Permit No.: 0170004-004-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

Initial Title V Air Operation Permit Revised DRAFT Permit No.: 0170004-004-AV

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Department of Environmental Protection

Lawton Chiles Governor Virginia B. Wetherell Secretary

Permittee:

Florida Power Corporation 3201 34th Street South St. Petersburg, FL 33711

Revised DRAFT Permit No.: 0170004-004-AV

Facility ID No.: 0170004 SIC Nos.: 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Crystal River Plant. 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 TV-1, Title V Conditions (version dated 12/02/97)

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 Plan received 12/22/95

Phase I Acid Rain permit dated 3/27/97

Alternate Sampling Procedure: ASP Number 97-B-01

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

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)

Best Management Plan, KBN, November 1990

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

Order Dated xx/xx/xx Extending Permit Expiration Date

Effective Date: January 1, 1999

Renewal Application Due Date: July 5, 2003

Expiration Date: December 31, 2003

Howard L. Rhodes, Director Division of Air Resources Management

HLR/sms/es

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 3; coal-, fly ash-, and bottom ash-handling facilities, and three relocatable diesel fired generators. 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, 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,	Three relocatable diesel fired generators, rated at 0.82 MW, 8.58 MMBtu/hr	
001	-	
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 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

These documents are on file with the permitting authority: Initial Title V Permit Application received June 14, 1996
Phase II NOX Compliance Plan dated December 19, 1997.
Phase I Acid Rain permit dated March 27, 1997.
Revision to Permit Application received April 17, 1998

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

- 1. APPENDIX TV-1, TITLE V CONDITIONS is a part of this permit. {Permitting note: APPENDIX TV-1, 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. <u>Prevention of Accidental Releases (Section 112(r) of CAA)</u>. If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
- b. certification forms and/or RMPs according to the promulgated rule schedule. [40 CFR 68]
- 5. <u>Unregulated Emissions Units and/or Activities</u>. 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. <u>Insignificant Emissions Units and/or Activities.</u> 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.]

- 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]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4.

F.A.C., (condition 58. of APPENDIX TV-1, TITLE V CONDITIONS.)}

- 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

Operating Permits Section

61 Forsyth Street

Atlanta, GA 30303

Phone: 404/562-9099

Fax: 404/562-9095

11. 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 No. 52., Appendix TV-1, Title V Conditions} [Rule 62-214.420(11), 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, capable of burning bituminous coal and used oil, with number 2
	fuel oil as a startup fuel, with emissions 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, capable of burning bituminous coal and used oil, with number 2
	fuel oil as a startup fuel, with emissions 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.

{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
002	4795	Bituminous Coal

[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.}

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

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A.3. Methods of Operation. Fuels. The only fuel allowed to be burned is bituminous coal, with the exception that number 2 fuel oil may be used as an ignitor fuel. 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.15 of this permit.

[Rule 62-213.410, F.A.C., 0170004-002-AO and 0170004-005-AO]

Emission Limitations and Standards

A.4.a. <u>Visible Emissions - Emissions Unit 001</u>. Visible emissions shall not exceed 40 percent opacity. 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.** <u>Visible Emissions Emissions Unit 002</u>. Visible emissions shall not exceed 20 percent opacity, 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.** <u>Visible Emissions Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

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

- A.6. <u>Particulate Matter</u>. 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. <u>Particulate Matter Soot Blowing and Load Change</u>. 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.]
- **A.8.** Sulfur Dioxide. When burning coal, sulfur dioxide emissions shall not exceed 2.1 pounds per million Btu heat input.

[Rules 62-213.440, F.A.C. and PPSC PA 77-09]

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

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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

[Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

A.10. 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.11. 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.10 and A.12.

[Rule 62-296.405(1)(f)1.b., F.A.C.]

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Method 5 or 17.

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- A.12. 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:
 - 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 SO₂ 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.13. Annual Tests Required - PM and VE. Except as provided in specific conditions I.6 and 1.7 of this permit, emission testing for particulate matter emissions and visible emissions shall be performed annually, no later than July 1st of each year, except for units that are not operating

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because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service.

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

A.14. 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.15.** 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.16. This emissions unit is also subject to conditions I.1 through I.15 contained in Subsection I. Common Conditions.
- A.17. These emissions units are also subject to condition K.1 contained in Subsection K. Used Oil Common Condition.

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 and used oil, with number 2	
	fuel oil as a startup fuel, and natural gas as a startup and low-load flame	
٠	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 M	
,	6665 MMBtu/hr, capable of burning bituminous coal 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.

{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
003	6665	Bituminous Coal

[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.}

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

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B.3. Methods of Operation. Fuels. The only fuel allowed to be burned is bituminous coal, 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 except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.42(a)(1) & (2)]

B.5. 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) derived from liquid fossil fuel.
- (2) 520 nanograms per joule heat input (1.2 lb per million Btu) 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:

 $PS_{SO2} = [y(340) + z(520)]/(y+z)$

where:

PS_{SO2} 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.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 NO₂ in excess of:
 - (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
 - (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel.

(3) 300 nanograms per joule heat input (0.70 lb per million Btu) 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:

$$PS_{NOx} = \underline{x(86)+y(130)+z(300)}$$

 $x+y+z$

where:

PS_{NOx} = 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]

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_2 , and NO_x standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, SO_2 , or NO_x 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_2 = oxygen concentration, percent dry basis.

 F_d = 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_2 concentration (% O_2). The O_2 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_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.

- (iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 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 SO₂ 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_2 concentration (% O_2). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 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_x concentration.
- (i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
- (ii) For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.
- (iii) The NO_x emission rate shall be computed for each pair of NO_x and O_2 samples. The NO_x 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, SO₂ and NO_x may be determined by using the Fc 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).

 $%CO_2$ = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c 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_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
- (A) When F_0 is less than 0.97 F_{0a} , then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
- (B) When F_0 is less than 0.97 F_{0a} and when the average difference (\overline{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if Fo is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , 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 °C (320 °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 SO₂ 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 SO₂ (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 SO₂ 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 O_2 concentration (% 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 NOx and SO₂ 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]

Monitoring of Operations

- **B.10.** 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.11.** Record Heat Input. The owner or operator shall make and maintain records of the heat input to the boiler from all fuels at all times to demonstrate compliance with specific condition **B.3** of this permit.

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

B.12. Annual Tests Required - PM, VE, SO₂ and NOx. 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, no later than April 1st of each year, except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. [Rules 62-4.070(3) and 62-213.440, F.A.C.]

B.13. Pursuant to 40 CFR 60.45 Emission Monitoring.

CMS for Opacity, SO₂, NOx, and CO₂ 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:

[In parts per million]

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Fossil fuel	Span value for	Span value for
	sulfur dioxide	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:

 $E = CF[20.9/(20.9-percent O_2)]$

where:

E, C, F, and % O₂ 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:

 $E = CF_c [100/percent CO_2]$

where:

E, C, F_c and %CO₂ 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 4.15×10^4 M ng/dscm per ppm (2.59×10^{-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, 0.322×10^{-7} scm CO_2 /J (1,200 scf CO_2 /million Btu) for propane, and 0.338×10^{-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):

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

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

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

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

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]

Excess Emission Reports.

- (g) Excess emission reports shall be submitted to the <u>Department</u> 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) <u>Nitrogen oxides</u>. 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.14. 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.15. Ambient Air Monitoring. The owner or operator shall continue to operate the existing ambient monitoring devices for sulfur dioxide and total 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 total 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.16. 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.17. This emissions unit is also subject to conditions I.1 through I.15, except for I.2 and I.3, contained in Subsection I. Common Conditions.
- **B.18.** These emissions units are also subject to conditions **J.1** through **J.5** contained in **Subsection J. NSPS Common Conditions.**
- B.19. 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.

E.U. ID	
No.	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.

Emissions unit 006, 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 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, 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 Units 1 and 2. Fly ash is pneumatically conveyed from the 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, 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 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, 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 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:

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

[Rules 62-4.160(2), F.A.C. 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	Emission Limit
	(pounds per hour)	(tons per year)
006	3.5 ^a	15.4 ^a
008	0.6 a	2.6 ^a
009	2.2 ^b	9.6 ^{b, c}
010	2.2 ^b	9.6 ^{b, c}

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.
- 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 two decimal places.

[AC 09-256791]

C.3. <u>VE in Lieu of Stack Test</u>. 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 rule 62-297, F.A.C.

[Rule 62-297.620(4), F.A.C., 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., 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 by July 1st 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 Units 1 and 2 to the silo (emissions unit 008) at the same time. The tests shall be conducted during a period when both Units 1 and 2 are operating at 90 to 100% of full load while sootblowing. A statement of the Unit loads, verifying the tests were conducted during sootblowing shall be submitted with the test reports.

[Rule 62-4.070(3), F.A.C., AC 09-256791]

Common Conditions

C.6. This emissions unit is 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.

E.U. ID	
No.	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).

Emissions unit 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). 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. <u>Permitted Capacity</u>. The transfer rates shall not exceed 16 tons per hour (8 tons per hour from each FFSG unit).

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

Emission Limitations and Standards

D.2. <u>Visible Emissions (VE) Limitation</u>. Visible emissions shall not exceed the emission limit of 20% opacity established by Rule 62-296.320(4)(b)1. 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., 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 by June 1st of each year 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 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, AO 09-248541 (test frequency base date)]

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	E.U. ID	
ID No.	No.	Brief Description
7775047	001	Three relocatable diesel fired generators, with a maximum <u>combined</u> rating of 2460 kW, and heat input of 25.74 MMBtu/hr while being fueled by 186.3 gallons of new number 2 fuel oil per hour. Emissions are exhausted through a 15 ft. stack on each unit.

These relocatable emissions units are Caterpillar Model 3508-DITA 820 kilowatt diesel generators. The generators may be relocated at 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. The future FPC Polk County Site, County Road 555, 1 mi. southwest of Homeland, Polk County.

{Permitting Notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack. This subsection of this permit is applicable only when the generators are located at the Crystal River Plant. This emissions unit has been established as a separate facility in the Department's data management system, ARMS, but is subject to the conditions of this permit when the generators are located at the Crystal River Plant.}

The following specific conditions apply to the emissions units listed above when located at the Crystal River Plant:

Essential Potential to Emit (PTE) Parameters

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

Unit No.	Heat Input	Fuel Type
7775047, 001	25.74 MMBtu/hr ¹	Number 2 Fuel
		Oil

1 This is total heat input for all three generators combined. [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 number 2 fuel oil with a maximum sulfur content of 0.5% S by weight shall be fired in the diesel generators. [Rule 62-213.410, F.A.C.]

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. Standard for Visible Emissions. Visible emissions from each generator shall not be equal to or greater than 20 percent opacity.

[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 conditions **E.8** and **E.13**. [Rule 62-213.440, F.A.C.]

Test Methods and Procedures

- E.7. <u>VE Test Method</u>. 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. Fuel Sulfur Test Methods. 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. In addition to the requirements of specific condition **I.11** of this permit, testing of emissions shall be conducted with the generators operating at 90 to 100 percent of the maximum fuel firing rate of 186.3 gallons per hour. Failure to submit the actual operating rate with the test report may invalidate the test. [Rules 62-297.310(2), F.A.C.; and AC 09-202080.]
- **E.10.** <u>Visible Emissions Testing Annual</u>. Each generator shall be tested on an annual basis no later than October 25th, however, annual emissions compliance testing for visible emissions is not required for these emissions units if they burned liquid fuels for less than 400 hours in the previous year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

E.11. <u>Test After Relocation</u>. 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.6, and E.8.

[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. Record Daily Hours of Operation. To demonstrate compliance with specific condition **E.4**, records shall indicate the daily hours of operation expressed as "engine-hours" for each of the generators, and the cumulative total 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 AC 09-202080.]

E.13. Record Sulfur Content. 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 five 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 Florida Power Corporation requests a relaxation of any of the federally enforceable emission limits of this subsection of 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.** Relocation. Florida Power Corporation 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 Florida Power Corporation 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.

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

Emissions unit 013, cooling towers for FFSG Units 1, 2 and 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 1.46×10^6 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 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. Permitted Capacity. The seawater flow rate shall not exceed 735,000 gallons per minute for all cells combined.

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

F.2. 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., AC 09-162037 (PSD-FL-139)]

Emission Limitations and Standards

F.3. 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. PM₁₀ emissions are estimated to be approximately 50% of the particulate matter emission rate.}

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

F.4. <u>Drift Eliminators</u>. 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., 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.5. Emission Test Method. Test using EPA Method 5, from 40 CFR 60 Appendix A, except that a distilled water rinse shall be used in place of acetone, and the impinger catch shall be excluded from the emission calculations. Testing shall be conducted on one cell, selected by the Department, of each of the four towers while the towers are being operated at 90-100% of the seawater flow rate. The seawater flow rate shall be estimated using manufacturers certified pump curves or other method approved by the Department. The test report shall include the estimated seawater and air flow rates.

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

Monitoring of Operations

F.6. Test Every Five Years. The owner or operator shall test for particulate emissions by June 30, 1998 and every five years thereafter, unless actual emissions exceed 80% of allowable, in which case compliance testing is required every 30 months until actual emissions are less than 80% of allowable.

[Rule 62-213.440, F.A.C., AC 09-162037 (PSD-FL-139), AO 09-236827 establishes the frequency base date]

Record Keeping and Reporting Requirements

F.7. Pump Run Time Meters Required. Equip each cooling tower seawater pump with a runhour 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., AC 09-162037 (PSD-FL-139)]

Common Conditions

F.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 G. This section addresses the following emissions unit.

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

Emissions unit 015, 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), F.A.C. and 62-210.200(PTE), F.A.C.]

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 PM₁₀.} [Rule 62-213.440, F.A.C.; 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.; Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

Monitoring of Operations

- G.4. Test Every Five Years. The 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) between May 1st and October 1st. 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 2002) between May 1st and October 1st. [Rule 62-213.440, F.A.C.; Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88, request of applicant]
- **G.5.** <u>Inspection</u>. The drift eliminators of both towers shall be inspected from the concrete walkways not less than every three months by 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 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 noted below.

[Rule 62-213.440, F.A.C.; 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 as follows:
 - a. Within 30 days after all visual inspections of the drift eliminators.
 - b. Within 45 days after the compliance testing of either tower.

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

E.U. ID	
No.	Brief Description
016	Material handling activities for coal-fired steam units.

Emissions unit 016, 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 not addressed by other emissions units. Emissions are particulate matter and PM_{10} from these activities.

{Permitting note(s): This emissions unit is regulated partially under Power Plant Siting Certification PA 77-09; 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.** <u>Visible Emissions</u>. 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. [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 PM₁₀) 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. (This condition applies to coal facilities associated with emissions units 004 and 003 -- 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. (This condition applies to coal facilities associated with emissions units 001 and 002 -- Units 1 and 2.) VE Test Method. EPA Method 9 shall be used to determine opacity. [Rules 62-4.070(3) and 62-213.440, F.A.C.]

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 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.

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,	Three relocatable diesel fired generators, rated at 0.82 MW, 8.58 MMBtu/hr	
001		
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

I.2. (This condition is not applicable to emissions units 004 and 003 - 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.]

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I.3. (This condition applies to emissions units 001 and 002 - 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) <u>Required Equipment</u>. 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.

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- 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; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- 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.) <u>Visible Emissions</u>. 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.]

1.9. 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) <u>Minimum Sample Volume</u>. 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) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.

E.U. ID	
No.	Brief Description
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 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 generator, 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 <u>any physical or operational change</u> 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 <u>five</u> 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 O2 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.

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

{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.** <u>Used Oil</u>. 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 used oil that may be burned in all four emissions units combined is 10 million gallons in any consecutive 12-month period.
- c. <u>Used Oil Containing PCBs Not Allowed:</u> 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. <u>Certification Required</u>: 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 onspecification 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. <u>Testing Required</u>: 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]

Revised DRAFT Permit No.: 0170004-004-AV

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power Corporation/Crystal River Plant

ORIS code: 628

Subsection A. 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 application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

a. DEP Form No. 62-210.900(1)(a), dated July 1, 1995. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_x) requirements for each Acid Rain unit is as follows:

E.U. ID						
No.	EPA ID	Year	2000	2001	2002	2003
001	1	SO2			,	
		allowances,				
		under Table	12320*	12320*	12320*	12320*
		2 or 3 of 40				
		CFR Part 73				
			Pursuant to 40 CFR part 76, the Florida Department of			
		NOx limit	Environmental Protection approves a NO _X standard emissions			
			compliance plan for unit 1. The NO _X compliance plan is			
	,		effective beginning 2000 through calendar year 2003. Under the			
			NO_X compliance plan, this unit's annual average NO_X emission			
			rate for each year, determined in accordance with 40 CFR part 75,			
			shall not exceed the applicable emission limitation, under 40 CFR			
			76.7(a)(1) of 0.40 lb/MMBtu for tangentially fired boilers.			
			In addition to the described NO compliance plan this write shall			
	,		In addition to the described NO _X compliance plan, this unit shall			
			comply with all other applicable requirements of 40 CFR part 76,			
			including the duty to reapply for a NO _X compliance plan and the			
			requirements co	overing excess em	ussions.	

E.U. ID						
No.	EPA ID	Year	2000	2001	2002	2003
002	2	SO2				
		allowances,			ALF	
		under Table	14173*	14173*	14173*	14173*
		2 or 3 of 40				
		CFR Part 73				
004	4	SO2				
		allowances,				
		under Table	23452*	23452*	23452*	23452*
		2 or 3 of 40				
		CFR Part 73				
003	5	SO2				
		allowances,	•			
		under Table	25040*	25040*	25040*	25040*
		2 or 3 of 40				
		CFR Part 73				

^{*} 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.

- **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.
 - 1. No permit revision shall be required for increase 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.
 - 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]
- A.4. <u>Fast-Track Revisions of Acid Rain Parts.</u> 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., Fast-Track Revisions of Acid Rain Parts.

 [Rules 62-213.413 and 62-214.370(4), F.A.C.]
- A.5. Comments, notes, and justifications: None

Subsection B. This subsection addresses Acid Rain, Phase I.

{Permitting note: The U.S. EPA issues Acid Rain Phase I permit(s)}

The emissions unit listed below is regulated under Acid Rain Part, Phase I, for Florida Power Corporation, Crystal River Plant, Facility ID No.: 0170004, ORIS code: 628.

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

- **B.1.** The owners and operators of these Phase I acid rain unit(s) must comply with the standard requirements and special provisions set forth in the permit(s) listed below:
- a. Phase I permit dated 03/27/97. [Chapter 62-213, F.A.C.]
- **B.2.** Nitrogen oxide (NO_X) requirements for each Acid Rain unit is as follows:

E.U. ID No.	ЕРА ПО	NOx limit*
-002		Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO _X early election compliance plan for unit 2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO _X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(1) of 0.45 lb/MMBtu" for tangentially fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(1) of 0.40 lb/MMBtu" for tangentially fired boilers until calendar year 2008. In addition to the described NO _X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO _X compliance plan and the requirements covering excess emissions.

-004	4	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO _X early election compliance plan for unit 4. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO _X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46
		lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO _X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO _X compliance plan and the requirements covering excess emissions.
-003	5	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO _X early election compliance plan for unit 5. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO _X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO _X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO _X compliance plan and the requirements covering excess emissions.

^{*} Based on the Phase II NO_X Compliance Plan dated December 19, 1997.

B.3. Comments, notes, and justifications: none

Facility ID No.: 0170004

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 ^{1, 2}	Revised Date(s)
001	Unit 1	AO 09-169341	12/20/89	12/18/94		2/11/94 2/6/97
002	Unit 2	AO 09-191820	5/21/91	5/21/96		6/24/91 2/11/94 2/6/97
001 & 002	Units 1 and 2 Used Oil Firing	0170004-002-A0 (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
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		
800	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.			Issue	Expiration	Extended	Revised
ID No.	Description	Permit No.	Date	Date	Date ^{1, 2}	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		
7775047 , 001	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		

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., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Table 1-1, Summary of Air Pollutant Emission Standards

Florida Power Corporation Crystal River Plant

Revised DRAFT Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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

			Allowable Emissions			Equivalent Emissions ¹			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TP	Υ	Regulatory Citations	See Permit Condition(s)
VE (Unit 1)	Coal No. 2 fuel oil as ignitor ^a	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 ^a	8760	20% opacity (except for one two-minute period per hour, opacity ≤ 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 ^a	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

		•	Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	T PY	lb./hour	Regulatory Citations	See Permit Condition(s)
PM	Coal No. 2 fuel oil as ignitor ^a	8760	0.1 lb/mmBtu			375. 1642.5 (Unit 1) (Unit 1: 479.5 2100.2 (Unit 2) (Unit 2	296.405(1)(b), F.A.C.	A.6.
PM Soot Blowing & Load Change	Coal No. 2 fuel oil as ignitor ^a	8760	0.3 lb/mmBtu during the 3-hours in any 24-hour period of excess emissions.			1125 615.9 (Unit 1) (Unit 1 1438.5 787.6 (Unit 2) (Unit 2	210.700(3), F.A.C.	A.7.
SO ₂	Coal No. 2 fuel oil as ignitor ^a	8760	2.1 lb/mmBtu heat input			7875 34,492 (Unit 1) 5 (Unit 1) 10,069. 5 44,104 (Unit 2) 4 (Unit 2)	213.440, F.A.C. and PPSC PA 77-09	A.8.

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	

		·	Allowable Emissions			Equivalent Emissions	1, b		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
PM	Coal ^a	8760	0.10 lb/mmBtu			666.5	2919.3	40 CFR 60.42(a)(1) & (2)	B.4.
VE	Coal ^a	8760	20% opacity (except for one six-minute period per hour of 27% opacity)					40 CFR 60.42(a)(1) & (2)	B.4.
SO ₂	Coal ^a	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.
NOx	Coal ^a	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.

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.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory Citations	See Permit Condition(s)
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 ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
VE		8760	20% opacity				Rule 62-	D.2.
						38 300	296.320(4)(b)1,	
						100	F.A.C.	

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	
7775047, 001	Three Relocatable Diesel Fired Generators.	

		_	Allowable Emissions			Equivalent Emissions ¹			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
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 ₂	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 7775047, 001:

Equivalent emissions are for all three diesel generators combined.

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.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	/lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
PM		4320		11.9,		428, all 925, all	Rule 62-	F.3.
				each cell		cells cells	213.440,	
							F.A.C., AC 09-	
,							162037 (PSD-	
						# 1	FL-139)]	

Emissions Unit	Brief Description
015	Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
PM		8760		175,		766.5	Rule 62-	G.2.
				each		each	213.440,	
1				tower		tower	F.A.C.; Modified	
						100	PSD permit,	
							PSD-FL-007	

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.	-	

			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb:/hour	TPY	Regulatory	See Permit
		per Year						Citations	Condition(s)
VE		8760	20% opacity					40 CFR 60.252	H.1 & H.2
								(Units 4 and 5)	
								and PPSC PA77-	
								09 (Units 1, 2, 4	
								and 5)]	
PM		8760	Practices described in the				A-1-1-	AC 09-162037,	H.3
			Best Management Plan					PSD-FL-139	
								specific	
								condition 3	

Notes for all tables:

¹ The "Equivalent Emissions" listed are for informational purposes only. NA = not applicable

Table 2-1, Summary of Compliance Requirements

Florida Power Corporation Crystal River Plant Revised DRAFT Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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

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.

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)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or		Method	Frequency	Base Date ¹	Compliance Test		Condition(s)
Parameter					Duration		
VE	Coal ^a	EPA Method 9	Annual	June 1st	1 hour	Yes	B.8, B.12
PM	Coal ^a	EPA Methods 5 and 17	Annual	June 1st	3 hours		B.8, B.12
SO ₂	Coal ^a	EPA Methods 6. 6A, 6C	Annual	June 1st	3 hours	Yes	B.8, B.12
NOx	Coal ^a	EPA Methods 7, 7A, 7C, 7D, 7E	Annual	June 1st	3 hours	Yes	B.8, B.12

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.

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

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
7775047, 001	Three Relocatable Diesel Fired Generators

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date ¹	Minimum Compliance Test Duration	CMS ²	See Permit Condition(s)
SO ₂	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			<u>:-</u>	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 ₂	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

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)	Compliance Method	Testing Frequency	Frequency Base Date ¹	Minimum Compliance Test	CMS ²	See Permit Condition(s)
Parameter	NA	EPA Method 5	Con note (a) of	Coo noto (a)	Duration	No	
PM	I NA	EFA Method 5	See note (a) of this table	See note (a) of this table	3 hours	No	F.5.

Note for Emissions Unit 013:

(a) Testing frequency is by June 30, 1998 and every five years thereafter, unless actual emissions exceed 80% of allowable, in which case compliance testing is required every 30 months until actual emissions are less than 80% of allowable.

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	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or		Method	Frequency	Base Date ¹	Compliance T est		Condition(s)
Parameter					Duration		
PM	NA	Sensitive paper method	See note (a) of	See note (a)		No	G.3.
			this table	of this table			
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.

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.	

No regular testing of Emissions Unit 016 is required.

Notes for all tables:

NA = not applicable

 $^{^{1}}$ Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. 2 CMS = continuous monitoring system

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

Florida Power Corporation Crystal River Plant Revised DRAFT Permit No.: 0170004-004-AV

Facility ID No.: 0170004

<u>Unregulated Emissions Units and/or Activities</u>. 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.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID	
No.	Brief Description of Emissions Units and/or Activity
017	Fuel and lube oil tanks and vents ¹
018	Sewage treatment, water treatment, lime storage ²
019	Two 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.

Rotoclone 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.

2 This unregulated emissions unit consists of the following facilities:

Associated with Units 4 and 5:

Water treatment systems for Units 4 and 5.

Associated with the Crystal River Site:

Sewage treatment plant.

Lime storage.

[electronic file name: 0170004u.doc]

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

Florida Power Corporation Crystal River Plant Revised DRAFT Permit No.: 0170004-004-AV Facility ID No.: 017004

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 refueling and storage tanks.
- 2. Diesel fire pump and tank at Unit 1.
- 3. 260 kW emergency diesel generator at Unit 3 technical support center.
- 4. Unit 3 diesel generator air compressor.
- 5. Unit 3 halon fire protection system.
- 6. Two fire protection tanks at Unit 3.
- 7. Fire pump house emergency diesel generator units and electric generator units.
- 8. Laboratory facilities.
- 9. CEM equipment and calibration gas storage and venting.
- 10. Surface coating of less than 6.0 gallons per day.
- 11. Brazing, soldering and welding.
- 12. Grounds maintenance.

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APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedure to Obtain Permits: Application.
- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
 - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
 - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
 - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.

[Rule 62-4.050, F.A.C.]

3. <u>Standards for Issuing or Denying Permits</u>. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

Modification of Permit Conditions.

- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:
 - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
 - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
 - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
 - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

Suspension and Revocation.

- (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:
 - (a) Submitted false or inaccurate information in application or operational reports.
 - (b) Has violated law, Department orders, rules or permit conditions.
 - (c) Has failed to submit operational reports or other information required by Department rules.
 - (d) Has refused lawful inspection under Section 403.091, F.S.

[Rule 62-4.100, F.A.C.]

7. Not federally enforceable. Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

8. Transfer of Permits.

- (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.
- (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
- (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
- (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
- (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.

[Rule 62-4.120, F.A.C.]

- 9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
- 10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays.

[40 CFR 70.6(a)(3)(iii)(B)]

11. Not federally enforceable. Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

[Rule 62-4.150, F.A.C.]

- 12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and,
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used; and,
 - 6. the results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits.

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
 - (a) A completed application on forms furnished by the Department.
 - (b) An engineering report covering:
 - 1. plant description and operations,
 - 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
 - 3. proposed waste control facilities,
 - 4. the treatment objectives,
 - 5. the design criteria on which the control facilities are based, and,
 - 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.
- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

 [Rule 62-4.210, F.A.C.]
- 14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

Chapter 62-103, F.A.C.

[Rule 62-4.220, F.A.C.]

- 15. <u>Public Notice, Public Participation, and Proposed Agency Action</u>. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C. [Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]
- 16. <u>Administrative Hearing</u>. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C. [Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. <u>Asbestos</u>. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

- 18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.
- (1) Air Construction Permits. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.
 - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
 - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
 - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
 - 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
 - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
 - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
 - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,
 - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,
 - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.
 - c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

- d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
- 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

- 19. Not federally enforceable. Notification of Startup. The owner or operator of any emissions unit or facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.
 - (a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
 - (b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

- (a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- (b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
 - (a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
 - 1. An air construction permit;
 - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
 - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
 - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
 - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
 - 2. A 30-day period for submittal of public comments; and,

- 3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.
- (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
- (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212,400, F.A.C., or Rule 62-212,500, F.A.C.:
 - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
 - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Ciass I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
 - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,
 - 2. A 30-day period for submittal of public comments.
 - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
 - (c) The notice shall identify:
 - 1. The facility;
 - 2. The name and address of the office at which processing of the permit occurs;
 - 3. The activity or activities involved in the permit action;
 - 4. The emissions change involved in any permit revision;
 - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
 - 6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;
 - 7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

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8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

22. Administrative Permit Corrections.

- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
 - (a) Typographical errors noted in the permit;
 - (b) Name, address or phone number change from that in the permit;
 - (c) Any other similar minor administrative change at the source; and,
 - (d) A change requiring more frequent monitoring or reporting by the permittee.
 - (e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
 - (f) Changes listed at 40 CFR 72.83(a)(11), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 17-210.360(1)(e).
- (2) Upon receipt of such notifications the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) For facilities subject to Chapter 62-213, F.A.C., a copy shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.
- (4) The Department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, F.A.C., if the construction permit revisions incorporate requirements of federally enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application. [Rule 62-210.360, F.A.C.]

23. Reports.

- (3) Annual Operating Report for Air Pollutant Emitting Facility.
 - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
 - (c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

- 24. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

 [Rule 62-210.650, F.A.C.]
- 25. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.
- (1) Application for Air Permit Long Form, Form and Instructions.
 - (a) Acid Rain Part (Phase II), Form and Instructions.
 - 1. Repowering Extension Plan, Form and Instructions.
 - 2. New Unit Exemption, Form and Instructions.
 - 3. Retired Unit Exemption, Form and Instructions.
 - (b) Reserved.
- (5) Annual Operating Report (AOR) for Air Pollutant Emitting Facility, Form and Instructions. [Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

26. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.

[Rules 62-213.205 and 62-213.900(1), F.A.C.]

- 27. Annual Emissions Fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C. [Rule 62-213.205(1)(g), F.A.C.]
- 28. Annual Emissions Fee. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request. [Rule 62-213.205(1)(j), F.A.C.]
- 29. <u>Annual Emissions Fee.</u> DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be completed by the permittee and submitted with the annual emissions fee. [Rule 62-213.205(4), F.A.C.]
- 30. <u>Air Operation Permit Fees.</u> After December 31, 1992, no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source. [Rule 62-213.205(5), F.A.C.]
- 31. <u>Permits and Permit Revisions Required</u>. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C. [Rule 62-213.400, F.A.C.]
- 32. No Title V source may operate except in compliance with Chapter 62-213, F.A.C. [Rule 62-213.400(1), F.A.C.]
- 33. <u>Changes Without Permit Revision</u>. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
- (1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
- (2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
 - (a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
 - (b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
 - (c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
- (3) A permitted source may implement operating changes after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C. [Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

- (1) Those permitted Title V sources making any change that constitutes a modification pursuant to paragraph (a) of the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to paragraph (b) of the same definition, may implement such change prior to final issuance of a permit revision in accordance with Rule 62-213.412, F.A.C., provided the change:
 - (a) Does not violate any applicable requirement:
 - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
 - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
 - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
- (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.
- (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rule 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.
- (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.
- (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
- (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, 62-4.050(1) & (2), and 62-210.900, F.A.C.
 - (a) Timely Application.
 - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
 - (b) Complete Application.
 - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
 - 2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source

under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C. 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete. 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

- 36. <u>Confidential Information</u>. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. [Rule 62-213.420(2), F.A.C.]
- 37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
 [Rule 62-213.420(3), F.A.C.]
- 38. <u>Certification by Responsible Official (RO)</u>. 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.]

- 39. a. <u>Permit Renewal and Expiration</u>. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate.
 - b. <u>Permit Revision Procedures.</u> Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause.

- (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
 - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
 - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
 - (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

40. Insignificant Emissions Units or Pollutant-Emitting Activities.

- (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
- (b) An emissions unit or activity shall be considered insignificant if:
 - 1. Such unit or activity would be subject to no unit-specific applicable requirement;
 - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); and
 - 3. Such unit or activity would not emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead:
 - b. 1,000 pounds per year or more of any hazardous air pollutant;
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

- 41. <u>Permit Duration</u>. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years. [Rule 62-213.440(1)(a), F.A.C.]
- 42. <u>Monitoring Information</u>. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. [Rule 62-213.440(1)(b)2.a., F.A.C.]

43. <u>Retention of Records.</u> Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

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

- 44. <u>Monitoring Reports</u>. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]
- 45. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., any deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[Rule 62-213.440(1)(b)3.b., F.A.C.]

- 46. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- 47. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]
- 48. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

 [Rule 62-213.440(1)(d)3., F.A.C.]
- 49. A Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- 50. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- 51. <u>Confidentiality Claims.</u> Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C.

[Rule 62-213.440(1)(d)6., F.A.C.]

52. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statement shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. The statement of compliance shall include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement. The statement shall include identification of all methods used to demonstrate compliance and identification of each term or condition of the permit for which any unit has not remained in compliance during the period covered by the statement. For each term or condition for which the source has not remained in compliance during the period covered by the statement, the statement shall also identify each unit not in compliance and each term and condition with which the unit was not in compliance and state the inclusive dates that the source was not in compliance, the actions taken to achieve compliance and the method used to demonstrate compliance. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C. [Rule 62-213.440(3), F.A.C.]

- 53. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

 [Rule 62-213.460, F.A.C.]
- 54. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
- (1) Major Air Pollution Source Annual Emissions Fee (AEF) Form. [Rule 62-213.900(1), F.A.C.]

Chapter 62-256, F.A.C.

55. Not federally enforceable. Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.

[Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

- 56. <u>Refrigerant Requirements</u>. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
- (1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
- (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166:
- (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.

[40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

Chapter 62-296, F.A.C.

- 57. Not federally enforceable until SIP approved. <u>Industrial, Commercial, and Municipal Open Burning Prohibited.</u> Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
 - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or
 - (b) An emergency exists which requires immediate action to protect human health and safety; or
 - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

58. Unconfined Emissions of Particulate Matter.

- (4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.
 - 3. Reasonable precautions may include, but shall not be limited to the following:
 - a. Paving and maintenance of roads, parking areas and yards.
 - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar emissions units.
 - d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emissions unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - e. Landscaping or planting of vegetation.
 - f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - g. Confining abrasive blasting where possible.
 - h. Enclosure or covering of conveyor systems.
- 4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

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APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis,

shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

- 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
- 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

- 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall

extend 360 degrees around the stack.

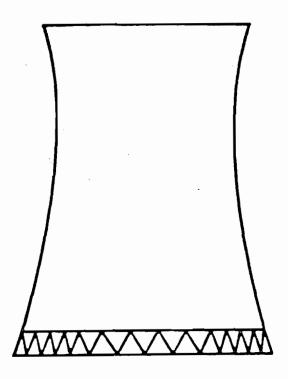
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

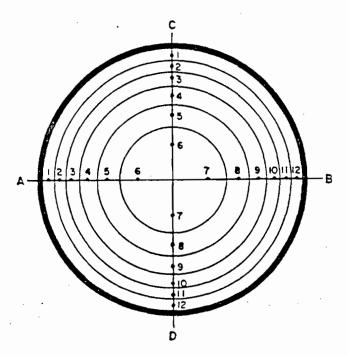
(e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) (continued)

- 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards. (f) Electrical Power.
- 1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

 (g) Sampling Equipment Support.
- 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
- a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
- b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
- c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
- 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test. [Rule 62-297.310(6), F.A.C.]





EQUAL AREA MEASUREMENT POINTS

Position	Distance (feet)	from Edge (meters)
1 2 3 4 5	7.0 22.1 39.0 58.5 82.5 117.4	2.1 6.7 11.9 17.8 25.1 35.8

Figure 3.1

EQUAL AREA SAMPLING STATIONS
AT THE DRIFT ELIMINATOR LEVEL



ENVIRONMENTAL SYSTEMS COMPORATION 200 TECH CENTER DRIVE ENDEVILLE, TENNESSEE 37912

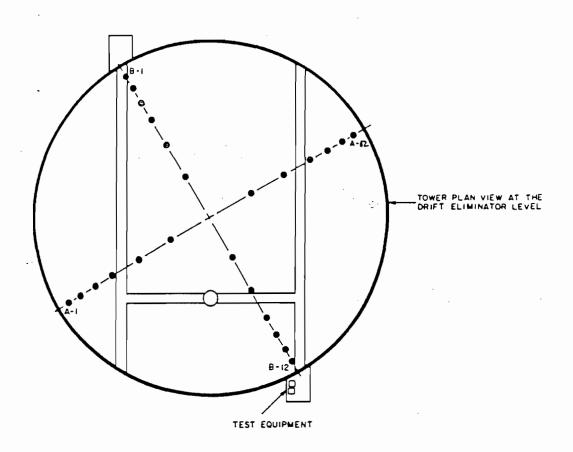


Figure 3.2
SAMPLING POINT LOCATIONS



ENVIRONMENTAL SYSTEMS CORPORATION 200 TECH CENTER DRIVÉ KNOXVILLE TENNESSEE 37512

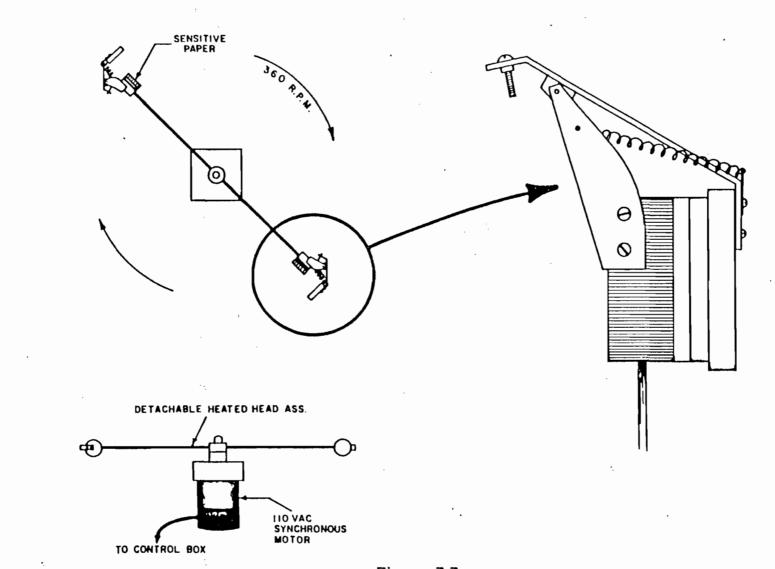


Figure 3.3
ROTATING SENSITIVE PAPER MACHINE



TABLE 297.310-1 CALIBRATION SCHEDULE (version dated 10/07/96)

				
[Note: This table is referenced in Rule 62-297.310, F.A.C.]				
•	MINIMUM			
	CALIBRATION	REFERENCE		
ITEM	FREQUENCY	INSTRUMENT	TOLERANCE	
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%	
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F	
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F	
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale	
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3	
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"	
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%	
	3. Check after each test series	Comparison check	5%	

[electronic file name: 297310-1.doc]

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]				
Pollutant (Circle One): SO ₂ NO _X TRS H ₂ S	CO Opacity			
Reporting period dates: From	to			
Company:				
Emission Limitation:				
Address:				
Monitor Manufacturer:				
Model No.:				
Date of Latest CMS Certification or Audit:				
Process Unit(s) Description:				
Total source operating time in reporting period ¹ :				
Emission data summary 1	CMS performance summary 1			
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:			
a. Startup/shutdown	a. Monitor equipment malfunctions			
b. Control equipment problems	b. Non-Monitor equipment malfunctions			
c. Process problems	c. Quality assurance calibration			
d. Other known causes	d. Other known causes			
e. Unknown causes	e. Unknown causes			
2. Total duration of excess emissions	2. Total CMS Downtime			
3. Total duration of excess emissions x (100) / [Total	3. [Total CMS Downtime] x (100) / [Total source			
source operating time] % ²	operating time] % ²			
For opacity, record all times in minutes. For gases, record all times in hours. For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted. Note: On a separate page, describe any changes since last quarter in CMS, process or controls.				
I <u>certify</u> that the information contained in this report is true, acc	curate, and complete.			
Name:				
Signature:	Date:			
Title:	· 			

[electronic file name: figure1.doc]

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

STEP 1 Identify the source by plant name, State, and ORIS code from NADB Crystal River, FL, 628

STEP 2
Enter the boiler ID#
from NADB for each
affected unit, and
indicate whether a
repowering plan is
being submitted for
the unit by entering
"yes" or "no" at
column c. For new
units, enter the requested information
in columns d and e

Compliance Plan Repowering New Units New Units Boiler ID# Unit Will Hold Allow-Plan ances in Accordance with 40 CFR Commence Manitor 72.9(c)(1) Operation Date Certification Deadline 1 Yes No 2 No Yes No Yes Yes Yes Yes Yes Yes

STEP 3 Check the box if the response in column c of Step 2 is "Yes" for any unit 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.

DEP Form No. 62-210.900(1)(a) - Form Effective: 7-1-95

Read the standard

requirements and certification, enter the name of the

designated repre-

sentative, and sign

STEP 4

and date

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 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 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 plans), 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;
- 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:
- 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 ## Pardere	Date 12/14/95

STEP 5 (optional) Enter the source AIRS and FINDS identification numbers, if known

AIRS			
FINDS			



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

APR 0 7 1997

4APT-ARB

RECEIVED

APR 1 0 1997

BUREAU OF AIR REGULATION

Mr. W. Jeffrey Pardue
Designated Representative
Florida Power Corporation
3201 Thirty-fourth Street South
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Mr. Pardue:

Enclosed you will find the draft Phase I Acid Rain permit issued by the U.S. Environmental Protection Agency on March 27, 1997, for the affected sources in your nitrogen oxides early election compliance plan. This permitting action will become final 40 days after a notice is published in the <u>Federal Register</u> or local newspaper, whichever is later, unless adverse comment is received within 30 days after publication. Notice of this permitting action is scheduled for publication on April 11, 1997.

Your cooperation has been appreciated. If you have any questions or comments, please contact Mr. Scott Davis of my staff at (404) 562-9127.

Sincerely,

R. Douglas Neeley

Chief

Air and Radiation Technology Branch Air, Pesticides and Toxics Management Division

Enclosure

cc: Mike Kennedy, Florida Power Tom Cascio, Florida DEP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 100 ALABAMA STREET, S.W. ATLANTA, GEORGIA 30303-3104

PHASE I ACID RAIN PERMIT For NOx Early Election

Issued to:

Crystal River Plant

Operated by: Florida Power Corporation

Effective:

January 1, 1997 through December 31, 1999

This page will be replaced to document new EPA actions each time a new action is taken by the Agency. This is the initial permitting action:

Summary of Previous Actions

None.

Present Action

1. Permit, including the NO, early election compliance plan, issued as a direct final permit for Units 2, 4, and 5. This action will become final 40 days after notice in the Federal Register or local newspaper, whichever is later, unless adverse comment is received within 30 days after publication. (See page 1)

Winston A. Smith

Director, Air, Pesticides and Toxics Management Division

U.S. Environmental Protection Agency, Region 4

61 Forsyth Street, S.W.

Atlanta, Georgia 30303

Telephone: (404) 562-9077

Facsimile: (404) 562-9095



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 100 ALABAMA STREET, S.W. ATLANTA, GEORGIA 30303-3104

PHASE I ACID RAIN PERMIT For NOx Early Election

Issued to:

Crystal River Plant

Operated by: Florida Power Corporation

Effective:

January 1, 1997 through December 31, 1999

The Acid Rain Permit comprises the following:

1. The statement of basis containing:

Part A, with references to statutory and regulatory authorities, and comments, notes and justifications that apply to the source in general; and

Part B, for each Early Election unit at this source:

- a NO_x compliance plan; and,
- comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements.
- 2. The permit application forms that this source submitted, as corrected by EPA. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Statement of Basis. Part A

Page 2

Plant Name: Crystal River Plant

State: Florida ORIS Code: 0628

Statutory and Regulatory Authorities. In accordance with Title IV of the Clean Air Act Amendments of 1990, the U. S. Environmental Protection Agency issues this permit pursuant to 40 CFR part 72, subparts E and F, and part 76.

For further information contact:

Scott Davis, Acid Rain Contact U.S. EPA, Region 4 Air, Pesticides and Toxics Management Division

Telephone: (404) 562-9127 Facsimile: (404) 562-9095

Comments, notes and justifications that apply to the source in general:

None.

R. SCOTT DAVIS

Permit Reviewer

K. Acol

Signature

3/24/97

Statement of Basis. Part B

Page 3

Plant Name: Crystal River Plant

State: Florida
ORIS Code: 0628
Boiler ID#: 2

NO, Compliance Plan

EPA approves a nitrogen oxides early election plan for this unit for 1997-2007 under which this unit's annual average NO_x emission rate for each year, determined using the methods and procedures specified in 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a), of 0.45 lbs/mmBtu for tangentially fired units. If this unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to any revised NO_x emission limitation for Group 1 boilers that the Administrator may issue pursuant to section 407(b)(2) of the Act, until January 1, 2008.

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

None.

R. SCOTT DAVIS	,
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Permit Reviewer

K. Scott Daw D
Signature

3/24/97

Statement of Basis. Part B

Page 4

Plant Name: Crystal River Plant

State: Florida

ORIS Code: 0628

Boiler ID#: 4

NO_x Compliance Plan

EPA approves a nitrogen oxides early election plan for this unit for 1997-2007 under which this unit's annual average NO_x emission rate for each year, determined using the methods and procedures specified in 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a), of 0.50 lbs/mmBtu for dry bottom wall-fired units. If this unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to any revised NO_x emission limitation for Group 1 boilers that the Administrator may issue pursuant to section 407(b)(2) of the Act, until January 1, 2008.

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

None.

R. SCOTT DAVIS

Permit Reviewer

A Hoot

3/24/97

Statement of Basis. Part B

Page 5

Plant Name: Crystal River Plant

State: Florida

ORIS Code: 0628
Boiler ID#: 5

NO_x Compliance Plan

EPA approves a nitrogen oxides early election plan for this unit for 1997-2007 under which this unit's annual average NO_x emission rate for each year, determined using the methods and procedures specified in 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a), of 0.50 lbs/mmBtu for dry bottom wall-fired units. If this unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to any revised NO_x emission limitation for Group 1 boilers that the Administrator may issue pursuant to section 407(b)(2) of the Act, until January 1, 2008.

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

None.

R. SCOTT DAVIS

Permit Reviewer

K. Lot De

Signature

3/24/97

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)	•
Florida Electric Power Coordinating Group, Inc	c.,)	ASP No. 97-B-01
Petitioner.)	

ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

- 1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]
- 2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.
- 3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

Best Available Copy

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

- 4. Rule 62-296.405(1)(2), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.
- 5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."
- 6. Rule 297.310(7)(a)2., F.A.C., states, "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.
- 7. Rule 297.310(7)/a)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 62-210.360(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 and/or solid fuel for a total of no more than 400 hours."
- 8. Rule 297.310(7)(2)4., F.A.C., states, "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; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant..."
- 9. Rule 297.310(7)(a)5., F.A.C., states. "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."
- 10. Rule 297.310(7)(2)6., F.A.C., states, "For fossil fuel steam gener, tors on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup."

- 11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]
- 12. The fifth edition of the U. S. Environmental Protection Agency's <u>Compilation of Air Pollutant Emission Factors</u>, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]
- 13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

- 1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.
- 2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. 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;

- 2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;
- 3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;
- 4. 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 particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.
- 5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must 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 (or a request for mediation, as discussed below) 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 of

the Florida Statutes, 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
 - (d) A statement of the material facts disputed by each petitioner, if any;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement identifying the rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

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

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

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- (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;
 - (b) A statement of the preliminary agency action;
 - (t) A statement of the relief sought; and
 - (a) Either in explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

- (2) The names, addresses, and telephone numbers of any persons who may attend the mediation:
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
 - (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
 - (g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will tell the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the auministrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.069 and 120.57 remain available for disposition of the dispute, and the notice will

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specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

The petition must specify the following information:

- (2) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
 - (c) Each rule or portion of a rule from which a variance or waiver is requested;
 - (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
 - (e) The type of action requested;
 - (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver, when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully

each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clétic

January 28, 1997

Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32301

RECEIVED

JAN 28 1997

BUREAU OF

RE: Comments Regarding Draft Title V Permits

AIR REGULATION

Dear Mr. Fancy:

The Florida Electric Power Coordinating Group, Inc. (FCG), which is made up of 36 utilities owned by investors, municipalities, and cooperatives, has been following the implementation of Title V in Florida and recently submitted comments to you on draft Title V permit conditions by letter dated December 4, 1996. As indicated in that letter, representatives from the FCG would like to meet with you and other members of your air permitting staff to discuss some significant concerns that FCG member companies have regarding conditions that may be included in Title V permits issued by your office. While we will be discussing these issues with you and your staff in greater detail at that meeting, we would like to explain some of our concerns in this letter.

Primarily, the FCG members are concerned that the Title V pennits may contain conditions that are much different in important respects than those conditions currently included in existing air permits. During the rulemaking workshops and seminars conducted by the Department to discuss the rules implementing the Title V permitting program, representations were made on several occasions that industry could expect to see permit conditions that were substantively similar to existing permit conditions and that primarily the format was changing. Representations were also made to industry that Title V did not impose additional substantive requirements beyond what was already required under the Department's rules. Based on the first draft Title V permit that we have reviewed, we are concerned that there may be some attempt to change the substantive requirements on existing facilities through the Title V permitting process, and we would like to discuss this with you at the meeting we have scheduled for January 30, 1997.

1. Federal Enforceability--The FCG has long been concerned about the designation of non-federally enforceable permit terms and conditions. We are concerned about this issue because the Department's first draft Title V permits have included language stating that all terms and conditions would become federally enforceable once the permit is issued. This approach is consistent with the Department's guidance memorandum dated September 13, 1996 (DARM-PER/V-18), but we understand that the Department may now intend to remove all references to

Clair H. Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection January 28, 1997 Page 2

the federal enforceability of permit terms and conditions. We are also concerned about this approach because a Title V permit is generally federally enforceable and, without any designation of non-federally enforceable terms and conditions, the entire permit could be interpreted to be federally enforceable. As we stated in the December 4 letter as well as our letter dated October 11, 1996, all terms and conditions in a Title V permit do no: become enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act simply by inclusion in a Title V permit. To make it clear which provisions in a Title V permit are not federally enforceable (which are being included because of state or local requirements only), it is very important to specifically designate those conditions as having no federally enforceable basis. Such a designation is actually required under the federal Title V rules, which provide that permitting agencies are to "specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements." 40 CFR § 70.6(b). We would like to discuss with you our concerns about this issue and to again specifically request that when Title V permits are issued by the Department, conditions having no federally enforceable basis clearly be identified as such.

- 2. PM Testing on Ger-The FCG understands that the Dependent may attempt to require annual particulate matter compliance testing while firing natural gas to determine compliance with the 0.1 lb/mmBtu emission limit established under Rule 62-295.405(1)(5), F.A.C. The FCG member companies feel strongly that compliance testing for particulate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while firing natural gas, it is not required under the current permits for these units, and it should not be necessary since natural gas is such a clean fiel. Typically only de minimis amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department. and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 62-297.620, F.A.C., to allow a visible emissions test to be used in lieu of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.
- 3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had beer issued by the Department and indicated some concern regarding excess emission provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
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Page 3

excess emissions and because these rules have been approved as part of Florida's State Implementation Plan, the permit conditions are appropriate to be included in the permit. We understand that the Department intends to include as applicable requirements in Title V permit conditions the provisions of Rule 62-210.700, F.A.C. If the Department receives any further adverse comments regarding the excess emissions rule under 62-210.700, F.A.C., we would appreciate your contacting us. Because this issue is so important to us, we would like to discuss it with you in greater detail at our meeting on January 30.

- Compliance Testing for Combustion Turbines--While the Department's November 22, 1995, guidance regarding the compliance testing requirements for combustion the troines clearly states that the use of heat input curves based on ambient temperatures and humidities is to be included as a permit condition only if requested by a permittee, we understand that the Department may intend to include this requirement in Title V permits for all combustion turbines. As we are sure you recall, the FCG worked over a period of several months with the Department on the development of the guidance memorandum and it was clearly understood by FCG members that the heat input curves would not be mandated but would remain voluntary for any existing combustion turbine. It was also understood by FCG members that the requirement to conduct testing at 95 to 100 percent of capacity would be required only if the permit applicant requested the use of heat input curves. We understand that the Department may be interpreting the requirement to use heat input curves and to test at 95 to 100 percent of permitted capacity to be mandatory for all combustion turbines. We would like to clarify this with you during our meeting. Also, we would like to confirm that, regardless of whether a combustion turbine uses heat input curves or tests at 95 to 100 percent of permitted capacity, it is necessary to test at four load points and correct to ISO only to determine compliance with the nitrogen oxides (NOx) standard under New Source Performance Standard Subpart GG under 40 CFR § 60.332 and not annually thereafter.
- FCG is concerned about the possibility of the Department requiring a full permit revision to authorize the use of an approved test method not specifically identified in a Title V permit, even though the Department may have separately approved the use of the particular test method for a unit (i.e., through a compliance test protocol). It is the FCG's position that language should be included in all Title V permits indicating that other test methods approved by the Department may be used. Further, a full permit revision (including public notice) should not be necessary when a test method not previously identified in the permit is approved for use by a unit. The Department's subsequent approval of test methods should simply be included in the next permit renewal cycle. The FCG understands that the Department planned to confirm this approach with the U.S. Environmental Protection Agency Region IV, and we would like to discuss this issue with you at the January 30 meeting to learn of the agency's response.

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Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
January 28, 1997
Page 4

- 6. Quarterly Reports--The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applied only if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-296.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., cil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.
- Trivial Activities—As you may recall, in May of 1996, the FCG submitted to the Department a list of small, de minimis emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15, 1996, guidance memorandum (DARM-PER/V-15-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1995, list to be "trivial." We would lite to discuss a possible resciution of this issue with you and your staff at the January 30 meeting.
- 8. Permit Shield-The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempt to caveat the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the FCG's comments on the drift Title V permits. We very much appreciate the cooperation we have received from the P chamment throughout the

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Clair H. Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection January 28, 1997 Page 5

Title V implementation process, and we look forward to our meeting later this week. If you have any questions in the meantime, please call me at 561-525-7661.

Sincerely,

Rich Piper, Chair Chair FCG Air Subcommittee

Enclosures

Howard L. Rhodes, DEP cc: John Brown, DEP Pat Comer, DEP OGC Scott M. Sheplak, DEP Edward Svec, DEP FCG Air Subcommittee Angela Morrison, HGSS

10682

COMPILATION OF AIR POLLUTANT EMISSION FACTORS

VOLUME I: STATIONARY POINT AND AREA SOURCES

Office Of Air Quality Planning And Standards
Office Of Air And Radiation
U. S. Environmental Protection Agency
Research Triangle Park, NC 27711

1.4 Natural Gas Combustion

1.4.1 General¹⁻²

Natural gas is one of the major fuels used throughout the country. It is used mainly for inclustrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above 80 percent, and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon ditaile, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately 8900 kilocalories per standard cubic meter (1000 British thermal units per standard cubic foot), usually varying from 8000 to 9801 keal som (900 to 1100 Bru/sof).

1.4.2 Endissions And Controls3-5

Even though natural gas is considered to be a relatively clean-burning fuel, some emissions can result from combuttion. For example, improper operating conditions, including poor air/fuel mixing, insufficient air, etc., may cause large amounts of smoke, carbon monoxide (CO), and organic compound emissions. Moreover, because a sulfur-containing mercaptan is added to natural gas to permit leak detection, small amounts of sulfur oxides will be produced in the combustion process.

Nitrogen exides (NO₂) are the major poliutants of concern when burning natural gas. Nitrogen exide, emissions depend primarily on the peak temperature within the combustion chamber at well as the turnace-zone exygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO_x control techniques being applied to natural gas-fired bot ers (which result in characteristic changes in emission rates) are low NO_x burners and flue gas red rulion. Low NO_x burners reduce NO_x by accomplishing the combustion process in stages. Staging protectly delays the combustion process, resulting in a cooler flame which suppresses NO_x formation. The three most common types of low NO_x burners being applied to natural gas-fired billiers are staged air burners, staged fuel burners, and radiant fiber burners. Nitrogen oxide emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO_x burners. Other combustion staging techniques which have been applied to natural gas-fired boiliers include low excess air, reduced air preheat, and staged combustion (e.g., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO_x emission rates for these systems.

In a five gas recirculation (FGR) system, a portion of the five gas is recycled from the stability the burner windbox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO_x emissions by two mechanisms. The recycled flue gas—mule up of combustion products which art as inerts during combustion of the fivel/air mixture. This additional mass is heated in the combustion zone, thereby lowering the peak flame temperature and reducing the amount of NO_x formed. To a lesser extent, FGR also reduces NO_x formation by lowering the oxygen concentration in the primary flame zone. The amount of flue gas recirculated is a key operating parameter influencing NO_x emission rates for these systems. Flue gas

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recirculation is normally used in combination with low NO_x burners. When used in combination, - these techniques are capable of reducing uncontrolled NO_x emissions by 60 to 90 percent.

Two post-combustion technologies that may be applied to natural gas-fired boilers to reduce NO, emissions by further amounts are selective noncatalytic reduction and selective catalytic reduction. These systems inject ammonia (or urea) into combustion fine gase: to reduce inlet NO, emission rates by 40 to 70 percent.

Although not measured, all particulate matter (PM) from natural gas combustion has been estimated to be less than 1 micrometer in size. Particulate matter is composed of filterable and condensable fractions, based on the EPA sampling method. Filterable and condensable emission rates are of the same order of magnitude for boilers; for residential furnaces, most of the PM is in the form of condensable material.

'The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of NO₂ control systems such as FGR and low NO₂ burners reduces combustion efficiency (due to lower combustion temperatures), resulting in higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.41, 1.42, and 1.43.6 For the purposes of developing emission factors, natural gas combustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric And English Units). EMISSION FACTORS FOR PARTICULATE MATTER (PM)
FROM NATURAL GAS COMBUSTION*

Combustor Type		Filterable PM°		Condensable PM ^d		
(Slzc, 10 ⁶ Dtu/hr Heat Input) (SCC) ^h	kg/10 ⁶ in ³	76/10 ⁶ n ³	RATING	· kg/10 ⁶ m ³	10/10 ⁶ n ³	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	16 - 80	1 - 5	n :	ND	ND .	ΝΛ
Small industrial boilers (10 - 100) (1-02-006-02)	99 >	6.2	B	120	7.5	D
Commercial boilers $(0.3 - < 10)$ (1-03-006-03)	72	4.5	. C	120	7.5	С
Residential furnaces (<0.3) (No SCC)	2.8	. 0.18	. C	180		D

References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10⁶ cubic meters natural gas fired and lb of pollutant/10⁶ cubic feet natural gas fired. Based on an average natural gas higher heating value of 8270 keal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

SCC = Source Classification Code.

^c Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10).

. Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO₂), NITROGEN OXIDES (NO₂), AND CARDON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION*

				· . ·		· <u>·</u>	••	<u></u>	
Combustor Type	SO ₂ e			NO _x d			. CO.		
(Size, 10 ⁶ Blu/hr Heat Input) (SCC) ^h	kg/10 ⁴ m ³	1P\10g \(\vec{V_3}\).	RATINO	kg/10 ⁶ m ³	IP\IO _Q U ₃	RATINO	kg/10 ⁶ m ³	1P/10g U3	RATINO
Utility/large Industrial Doilers (> 100) (1-01-006-01, 1-01-006-04)		,			1:		•		
Uncontrolled	9.6	0.6	$\mathbb{R}^{n} \setminus A$	8800	ssor	٨	640	40	λ
Controlled - Low NO _x burners	9.6	0.6	, Å .:	=1300	811	D	מא	DN	ИХ
Controlled - Flue gas recirculation	9.6	0.6	.	850	53 ^f	D	DИ	ND	NA
Small Industrial Boilers (10 - 100) (1-02-006-02)							· .	: :	
Uncontrolled	9.6	0.6	٨	. 2240	140	٨	" 560 "	.35	А
Controlled - Low NO _x	9.6	0.6	. .	0001	. Blu	D	980	61	D
Controlled - Flue gns recirculation	9,6	0.6	, , , ,	480	→ 30 == +:	·C	590	"17	С
Commercial Boilers (0.3 - <10) (1-03-006-03)								· · · ·	
Uncontrolled	9.6	0.6	٠ ٨ .	1600	100	п	330	21	С
Controlled - Low NO _x burners	9.6	0.6.	A.	270 ⁻ .	17	C	425	. 27	С
Controlled - Flue gas recirculation	9.6	0.6	λ.	580	36	D	. ND t.:	- , ДИ	Νλ
Residential Furnaces (<0.3) (No SCC)			•			•			
Uncontrolled	9.6	0.6		. 1500	94	n	640	40	В

^a Units are kg of pollutant/10⁶ cubic meters natural gas fired and lb of pollutant/10⁶ cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. NID = no data. NA = not applicable.

b SCC = Source Classification Code.

^c Reference 7. Based on average sulfur content of natural gas, 4600 g/10⁶ Nm³ (2000 gr/10⁶ sef).

d References 10,15-19. Expressed as NO₂. For tangentially fired units, use 4400 kg/10⁶ m³ (275 lb/10⁶ ft³). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1. Note that NO_x emissions from controlled boilers will be reduced at low load conditions.
c References 9-10,16-18,20-21.

f Emission factors apply to packaged boilers only.

Table 1.4-3 (metric And English Units). EMISSION FACTORS FOR CARDON DIOXIDE (CO₂) AND TOTAL ORGANIC COMPOUNDS (FOC) FROM NATURAL GAS COMBUSTION.

Combustor Type	CO ₂ c			TOCd		
(Size, 10 ⁶ Btu/hr Heat Input) (SCC) ^b	kg/Ĭ0 ⁶ m ³	10,10 _e U ₃	RATING	kg/10 ⁶ m ³	19/10g U3	RATING
Utilitý/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	ND°	CIN	. ИЛ	281	1.7	С
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05	. D	928	5.8 ^g	С
Commercial hoilers (0.3 - < 10) (1-03-006-03)	1.9 E+06	1.2 15+05	С	128 ^h .	8.01	С
Residential furnaces (No SCC)	2.0 压+06	1.3 E+05	D	180 ^h	11 ^h	· D

All factors represent uncontrolled emissions. Units are kg of pollutant/10⁶ cubic meters and th of pollutant/10⁶ cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m³ (1000 Btn/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value. NA = not applicable.

b SCC = Source Classification Code.

c References 10,22-23.

d References 9-10,18,

c ND = no data.

Reference 8: methane comprises 17% of organic compounds.

Reference 8: methane comprises 52% of organic compounds.

h Reference 8: methane comprises 34% of organic compounds.

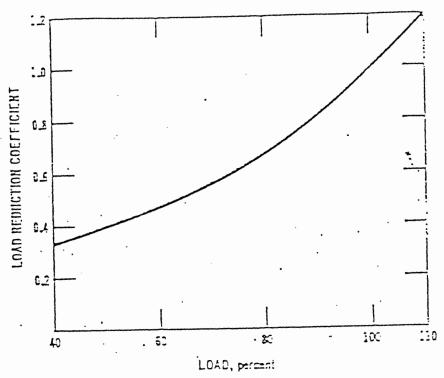


Figure 1.4-1. Load reduction coefficient as a function of boiler load. (Used to determine NO_x reductions at reduced loads in large boilers.)

References For Section :1.4

- Exhaust Gases From Combustion and Industrial Processes, EPA Contract No. EHSD 71-36, Engineering Science, Inc., Washington, DC, October 1971.
- 2. Cremical Engineers' Handbook, Fourth Edition, J. H. Perry, Editor, McGraw-Hill Book Company, New York, NY, 1963.
- Background Information Document For Industrial Boilers, EPA-450/3-82-0062,
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BEST AVAILABLE COPY

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Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Scone Road Tallahassee, Florida 32399-2400

Virginia B. Wetherell Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

Mr. Rich Piper, Chair Florida Power Coordinating Group, Inc. 405, Reo Street, Suite 100 Tampa, Florida 33609-1004

Dear Mr. Piper:

Enclosed is a copy of a Scrivener's Order correcting an error in the Order concerning particulate matter testing of natural gas fired boilers.

If you have any questions concerning the above, please call Yogesh Manocha at 904/488-6140, or write to me.

Sincerely,

M. D. Harley, P.E., DEE

P.E. Administrator

Emissions Monitoring Section Bureau of Air Monitoring and

Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP Pat Comer, FDEP

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)	
Florida Electric Power Coordinating Group, Inc.,) ,)	ASP No. 97-B-01
Petitioner.)	

ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.5., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 10^{+10} day of July 1997.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Olerk

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. 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 25, 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 in 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 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 constitues a

waiver of any right such person has to an administrative determination (hearing) under Section 120.57, Florida Statutes. DONE AND ORDERED this __//The day of __ Lec. ... Tallahassee, Florida.

> STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

FILING AND ACKNOWLEDGEMENT FILED, on this cate, pursuant to \$120.52 Figurda Statutes, with the designated Department Clerk, receipt of which is hereby acknowleaged.

> 12.12.86 Clerk

Date

VICTORIA J. TSCHINKEL

\Secretary

Twin Towers Office Building . . 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

.__ 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 Tecember, 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 32399-2400 Telephone (904)488-9730

Best Available Control Technology (BACT) Determination Helper Cooling Towers Florida Power Corporation Citrus County

The applicant proposes to install four helper cooling towers at the Crystal River power plant located eight miles northwest of Crystal River, Florida. The cooling towers will be constructed to maintain the discharge water temperature at the plant site to a level which complies with the facility's National Pollutant Discharge Elimination System (NPDES) permit limitations. Prior difficulties with complying with the NPDES outflow temperature limitation have initiated this requirement by the Environmental Protection Agency (EPA) that the cooling towers be constructed to maintain the proper temperature.

The applicant has indicated the maximum total annual tonnage of regulated air pollutants emitted from the four cooling towers based on 4,320 hours per year operation to be as follows:

	Maximum	Emissions	PSD Significant
	lbs/hr	tons/yr	Emission Rate
Pollutant	Per cell	All 36 cells	tons/vr
Particulate Matter PM ₁₀	11.89	925	25
	5.94	214 (estimate)	15

Rule 17-2.500(2)(f)2. of the Florida Administrative Code requires a BACT review for all regulated pollutants emitted from major facilities in an amount equal to or greater than the significant emission rates listed in the previous table.

· BACT Determination Requested by the Applicant

The BACT Determination requested by the applicant is given below:

Pollutant	Determination
Particulate Matter	Drift Eliminators
(includes PM ₁₀)	(99.8% efficient)

Date of Receipt of a BACT Application

March 9, 1989

Review Group Members

This determination was based upon comments received from the applicant and the Permitting and Standards Section.

BACT Determination Procedure:

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination will be based on the maximum degree of reduction of each pollutant emitted which the Department, on a case-by-case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination, the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in guestion the most stringent control available for a similar or identical source or source category. Ιf it is shown that this level οf technically or economically infeasible for the source question, then the next most stringent level of control determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any or unique technical, environmental, substantial or economic objections.

BACT Analysis

A review of the BACT/LAER Clearinghouse does not indicate that BACT determinations have previously been completed for cooling towers.

Evaporative cooling towers are used to provide waste heat rejection at electric power stations in order to improve efficiency and to lower cooling water discharge temperatures to environmentally safe levels. When brackish or saline water is used for cooling purposes there is typically drift emitted from the cooling tower. Drift is defined as the current of water droplets which are mechanically entrained in the cooling tower exhaust flow. Thus, it has a chemical composition similar to the circulating water in the cooling tower.

The Crystal River power units (1-3) use water obtained from the Gulf of Mexico for cooling purposes. In order to minimize the drift emitted from the towers, drift eliminators capable of controlling drift to 0.004 percent of the circulating water have been proposed.

Drift eliminators operate on the principle of centrifugal separation by causing the cooling tower exhaust stream to pass through curved ducts, with the heavy water droplets becoming trapped on the duct walls. Although vendors have guaranteed tower drift rates as low as 0.001 percent, consideration must be given to the test methods that support these guarantees.

There are several test methods that have been used or have been proposed for use to quantify drift rates. These methods are listed as follows:

- 1) Sensitized Paper
- 2) EPA Method 13A
- 3) EPA Method 5
- 4) Heated Glass Beads Isokinetic Method

The applicant has indicated that each of the mist eliminator vendors who submitted proposals guaranteed a drift rate of 0.001 percent based on the sensitive paper testing method. The sensitized paper method essentially uses the same principal to capture particulates as the mist eliminators themselves. In this method droplet collection is achieved by inertial impaction on water sensitive paper. The paper, which is chemically treated, is suspended above the mist eliminators such that droplets from the cooling tower will impinge upon the paper and generate a well-defined stain. The size and shape of the stain are functions of the impingement dynamics, i.e., speed and angle, and of the original droplet diameter. Based on simulation, a relationship between the stain and the droplet size has been developed.

Although the sensitized paper method has been widely used for drift measurements, it does have a major drawback. Testing has indicated that the sensitized paper method cannot provide data on droplet sizes below about 20-30 microns. Droplets with sizes below this range do not have the mass necessary to be captured by inertial impaction. These droplets tend to exhibit the same characteristic as the gaseous portion of the cooling tower exhaust and pass around the sensitive paper without being captured. This situation can be avoided to some degree by using methods which utilize isokinetic sampling.

Isokinetic sampling methods utilize equipment which allow samples to be drawn from a gas stream with a sampling velocity which is essentially equivalent to the velocity of the gas stream itself, and consequently the tendency for small particles to pass around the sampling device is minimized, thereby allowing the smallest particles to be captured. EPA Methods 13A and 5 and the heated glass beads method utilize the equipment necessary to perform sampling isokinetically.

A review of the isokinetic sampling methods used for sampling cooling towers indicates much variability. Testing results from one cooling tower indicates drift rates ranging from 0.0039 to 0.344 percent using repeated EPA Method 13A testing. This variability suggests that a drift limitation backed by EPA Method 13A testing may result in compliance problems which originate from faults with the test method itself.

Previous testing with the heated glass bead method indicates a testing variability which is much less than that which has been demonstrated by EPA Method 13A. The majority of the testing that has been conducted on cooling tower drift has been completed with either the heated glass bead or sensitized paper method. Based on the amount of data and the level of variability experienced, the heated glass bead method may have a stronger basis for backing a given drift limitation.

EPA Method 5 is another testing method that should be considered. Although EPA Method 5 has not been used previously for cooling tower drift measurement, the EPA believes that this method would yield results which are less variable than EPA Method 13A and would be more in line with the heated glass bead method.

Based on EPA's recommendation, the applicant has conducted recent testing using EPA Methods 5, 13A, and the Hot Bead Isokinetic Test Procedure. The study confirmed EPA's notion and established Method 5 as the preferred test method.

The Method 5 testing indicated that a test cell drift rate of 0.0004% can be achieved under the optimum configuration. This drift rate is based on a limited number of tests. Factors, affecting drift rate when scaling up from a test cell to full scale application, indicate that the drift rate will increase 5 fold. In addition, when comparing any two test results achieved with a specific design configuration, the results between tests varied by a factor of 2. To allow an adequate margin for the test uncertainty, scale-up factors, and operation/maintenance margin, FPC proposes that the permitted drift limit be 0.004%.

Environmental Impact Analysis

A review of the proposed cooling tower installations should account for the uniqueness of this particular project from an environmental standpoint. There are two factors that need to be considered:

- 1) The overall benefit of constructing the cooling towers
- 2) The existing background concentrations

As noted in the introduction of this determination, the proposal to construct the helper cooling towers is directed at complying with the EPA's request to reduce the outlet temperature of the cooling water used for units 1, 2, and 3. As this is the case, the proposal should be evaluated from the standpoint of providing an overall benefit to the environment and not the potential air impacts only.

It should be noted that although the cooling towers will emit particulates in the form of salt, the overall contribution to the area from the towers will be minimal. The Crystal River Power Facility is located approximately one mile from the Gulf of Mexico. It is expected that the natural contributions of salt deposition from wave action to this area will be substantially greater than that which would be emitted from the cooling towers.

BACT Determination by DER

Based on the information presented by the applicant and the Department's subsequent review, the Department believes that BACT is represented by using state-of-the-art drift eliminators and by limiting the drift rate to 0.004 percent, with EPA Method 5 or a departmental approved equivalent using the Alternate Sampling Procedure to be used as the basis for compliance.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Recommended by:	Approved by:
- 3th Jamey	Wale Wyothtradeur
C. H. Fancy, P.E., Chief Bureau of Air Regulation	Dale Twachtmann, Secretary Dept. of Environmental Regulation
AUJU; + 21 1990	29 August 1990
Date	Date //

State of Florida

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Or cast' And/Or To Other Than The Addresses			
To:	Loctn.:		
	Loctn.		
To:	Loctn.;		
From:	Date:		

TO:

Victoria J. Tschinkel

FROM:

Victoria Martinez

DATE:

January 26, 1979

SUBJECT:

BACT Determination, Florida Power Corporation

Units 1 and 2 Fly Ash Handling System, Crystal River Plant, Citrus County

Facility:

A fly ash handling system modifying the existing hydraulic system such that the fly ash generated by coal fired operation of Units #1 and #2 can be conveyed in a dry state to a storage silo providing for truck disposal. Currently, ash from unit #2 is hydraulically sluiced to an ash holding pond. The modification to handle fly ash as a dry material will include unit #1, to be converted from oil to coal in March, 1979. Fly ash particulate emission from the facilities are controlled by the following:

Source 1: Bag filter for unit 1 conveying line Source 2: Bag filter for transfer silo vent Source 3: Bag filter for storage silo vent

BACT Determination Requested by the Applicant:

Particulate*	lbs/hr.	tons/yr.**
Source 1	3.52	15.4
Source 2	0.03	0.13
Source 3	0.59	2.58

^{*}Emission levels to be attained with 99.9+% efficient bag dust collectors

Date of Receipt of a Complete BACT Application:

November 16, 1978

^{**}Based on 100% continuous load.

Victoria J. Tschinkel Page Two January 26, 1979

.Date of Publication in the Florida Administrative Weekly:

December 1, 1978

Date of Publication in a Newspaper of General Circulation:

May 5, 1978

Study Group Members:

Frank Darabi, DER St. Johns River Subdistrict, Gainesville; Mike Harley, DER Bureau of Air Quality Management, Tallahassee; George Layman, Gulf Power Company, Pensacola; Dave Puchaty/ William Brown, DER Southwest District, Tampa

Study Group Recommendations:

	and the second s			
		Particu	late	Opacity
	Source 1	Source 2	Source 3	
Frank Darabi	Baghouse with velocities sho is issued to is acceptable limblinding or baconsidered	ould be check insure it is mits; alarm s	ed when permit within ystem for bag	N.R.*
Mike Harley	3.52 lbs/hr baghouse			N.R.*
George Layman	Baghouse is	"State of th	e Art"	N.R.*
William Erown	3.52 lbs/hr baghouse	0.03 lbs/hr baghouse		5 %

*N.R. No response

Victoria Tschinkel Page Three January 26, 1979

BACT Determination by Florida Department of Environmental Regulation:

Particulate --- lbs/hr.

Source	1	3.52	Attainable with 99.9+% efficient bag dust collector
Source	2	0.03	Attainable with 99.9+% efficient bag dust collector
Source	3	0.59	Attainable with 99.9+% efficient bag dust collector

Opacity Less than 5%

Test Method: EPA's methods 1 - 5 as described in the August 17,

1977 Federal Register

Justification of DER Determination:

The low emission limitation determined as BACT for this fly ash handling system represents 99.9+% efficiency of control with the applicant's proposed bag dust collector. The reliability of the bag dust collector is well established and its efficiency is not surpassed by any other particulate pollution control device for the service proposed.

Details of Analysis May be Obtained by Contacting:

Victoria Martinez, BACT Coordinator Department of Environmental Regulation 2600 Blair Stone Road Twin Towers Office Building Tallahassee, Florida 32301

Recommen	dation fro	om: Bureau	of	Air	Quality	Management
by:	TOLL	canani		·		
		Subramani		•		
				٠.		
Date.	T_{λ}	20 30	9.7	0		

Approved by: True 1. Landel

Victoria J. Tschinkel

Date: Filiman 5, 1479

VJT:es

Attachment

State of Florida

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Fouting To District Official And/Or To Other Than The Adoptions				
To:	Locin.:			
To:	Loctn.;			
To:	Local:			
From:	Date:			

TO:

Jacob D. Varn

Secretary

FROM:

J. P. Subramani, Chief

Bureau of Air Quality Management

DATE:

August 16, 1979

SUBJECT:

BACT Determination - Florida Power Corporation Unit #2 Fly Ash Handling and Storage System,

Crystal River Plant, Citrus County

Facility:

The existing Unit #2 electrostatic precipitator will be modified to include thirteen new fields. Along with this modification, the existing Unit #2 fly ash handling system will be changed to allow for storage of the ash in dry state. Currently ash from Unit #2 precipitator is hydraulically sluiced to an ash holding pond. In the modified system, the vacuum required to draw ash from the precipitator will be produced by vacuum blowers rather than by the existing hydroveyors. The two lines conveying the ash from the Unit #2 precipitator to the transfer silo will be vented to the atmosphere after each going through bag filters (sources #4 and #5).

BACT Determination Requested by the Applicant:

		Lbs/Er.	Tons/Year
Source	= 4	2.2	9.6
Source	# 5	2.2	9. 6

Date of Receipt of a Complete BACT Application:

June 25, 1979

Date of Publication in the Florida Administrative Weekly:

August 3, 1979

Jacob D. Varn Page Two August 16, 1979

Date of Publication in a Newspaper of General Circulation:

August 5, 1979, St. Petersburg Times

Study Group Members:

A EACT determination on Unit #1 conveying line was completed January 30, 1979. There have been no significant technological improvements since that date. Thus we apply the same BACT, which obviates the need for a study group.

BACT Determination by the Department of Environmental Regulation:

Particulate	Lbs/Hr.	
Source #4	2.2	Attainable with a 99.9+% efficient bag dust collector
Source #5	2.2	Attainable with a 99.9% efficient bag dust collector
Test Method:		Methods 1 through 5, Title 40, Part 60 of the Code of Federal Regulations.

Justification of DER Determination:

A BACT determination on a Florida Power Unit #1, Fly Ash Handling system was completed in January 1979. There has been no significant improvement in technology since that date, and the low emission limitation determined as BACT for the fly ash conveying lines for Unit #2 represent 99.9% efficiency.

Details of the Analysis May be Obtained by Contacting:

Victoria Martinez, BACT Coordinator Department of Environmental Regulation Bureau of Air Quality Management 2600 Blair Stone Road Twin Towers Office Building Tallahassee, Florida 32301

Jacob D. Varn Page Three August 16, 1979

Recommendation from: Bureau of Air Quality Management

Date: A.16:157- 20 1979

Date:

21 S AUBUST 1979

JDV/es

Attachment



INTEROFFICE CORRESPONDENCE

Environmental & Licensing Affairs H2G

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 (ACO9-162037).

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

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. Fraze - w/attachment

pag/WJP9.BMP.Mcc

File: CRSA.1.2

CRNA.1.2

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:

KBN 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)

	Control Method			
Plant Area	Level l	Level 2	Level 3	
CR 1/2 Coal Storage Pile 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	 -	
CR 1/2 Ash Storage Areas 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	·	
CR 4/5 Coal Storage Pile 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		
CR 4/5 Ash Storage Area 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)

ma i	Control Method Level 1 Level 2 Level 3			
Plant Area	Level I	Level 2	revel 3	

Site Haul Roads		·		
Unpaved Haul Road	Water as needed		Reduce or	
	•	dust control	eliminate traffic	
		agent	on haul road	
Paved Haul Road	Water as needed	Use street vacuum to remove particulate matter from	Reduce or eliminate traffic on haul road	
		roadway cover trucks to		
		prevent dust emissions		
Cool Transfer Points				
Coal Transfer Points CR 1/2, CR 4/5	Operate baghouses on transfer points	Apply water at transfer points	Apply chemical dust control agent	
Ash Transfer Silos				
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	
Aardelite Plant 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. ACO9-162037, 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 KBN Engineering and Applied Sciences, Inc. (KBN) (KBN, 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

en e		Control	Estimated Control Efficiency
Source	Activity	Method	(%)
CR 1/2 Coal Storage Pile			
Active Coal Pile	Wind erosion Vehicular traffic	Water Water	80 80
Inactive Coal Pile	Wind erosion	Crusting agent	95
CR 1/2 Ash Storage Areas			
Active Ash Area	Wind erosion Backhoe to truck transfer	Water None	80 0 ·
Inactive Ash Area	Wind erosion	Crusting agent	95
CR 4/5 Coal Storage Pile			
Active Coal Pile	Wind erosion Vehicular traffic	Water Water	90 80
Inactive Coal Pile	Wind erosion	Crusting agent	95
CR 4/5 Ash Storage Area			
Active Ash Area	Wind erosion	Crusting agent	95
	Vehicular traffic	Chemical stabilizer	95
Inactive Ash Area	Wind erosion	Chemical wetting agent	90
Site Haul Roads Unpaved Roads	Vehicular traffic	Chemical stabilizer	95
Coal Transfer Points CR 1/2, CR 4/5	Transfer points	Enclosure	90
Ash Transfer Silos CR 1/2, CR 4/5	Transfer points	Enclosure	90
Aardelite Plant	Transfer points/ storage pile	Water spray	90

1.2 OBJECTIVES OF THE BMP

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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 Aardelite 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 BMP for fugitive dust control, it is first necessary to define certain terms used in the BMP.

<u>Fugitive dust</u> -- emissions of particulate matter (dust) which originate from an unconfined source, such as a storage pile, roadway, transfer point, etc.

<u>Visible emissions (VE)</u> -- 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

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 <u>CR 4/5 ASH STORAGE AREAS</u>

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

6.0 SITE HAUL ROADS

6.1 DESCRIPTION OF SOURCE

Crystal River plant haul roads include both unpaved limerock 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 HITIGATIVE 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

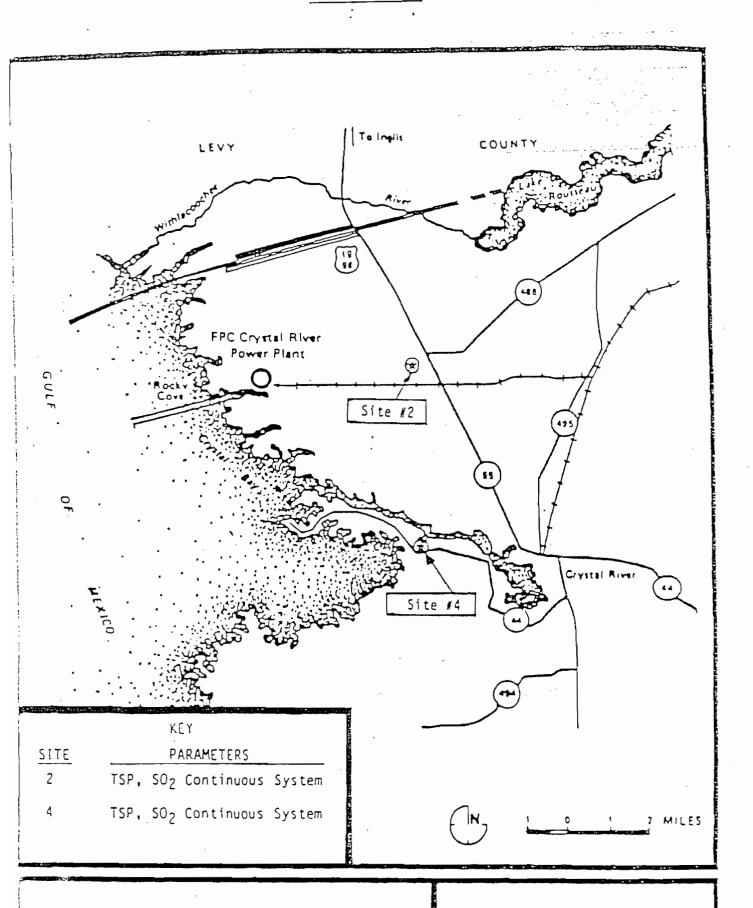
Action taken to mitigate visible emissions

Success of action in reducing/eliminating the visible emission

USTONESS CHESTONESS CHESTONESS CONTROL SELECTION SELECTION STATES OF SELECTION SERVICES CONTROL OF SERVICE

REFERENCES

- KBN Engineering and Applied Sciences, Inc. (KBN). 1989a. Particulate Matter Air Quality Impact Assessment--Florida Power Corporation Crystal River Plant. Gainesville, Florida.
- KBN Engineering and Applied Sciences, Inc. (KBN). 1989b. Letter to Mr. Eustice Parnelle, Environmental and Licensing Affairs, Florida Power Corporation, April 27, 1989. Gainesville, Florida.
- KBN Engineering and Applied Sciences, Inc. (KBN). 1990. Particulate Matter Air Quality Impact Assessment for Proposed Helper Cooling Towers for Units 1, 2, and 3, Crystal River Plant. Gainesville, Florida.



FLORIDA POWER CORPORATION, AMBIENT AIR MONITORING LOCATIONS, CRYSTAL RIVER, FLORIDA

FLORIDA POWER CORPORATION

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

Abbreviations and Acronyms:

°F: Degrees Fahrenheit

BACT: Best Available Control Technology

CFR: Code of Federal Regulations

DEP: State of Florida, Department of Environmental Protection

DARM: Division of Air Resource Management

EPA: United States Environmental Protection Agency

F.A.C.: Florida Administrative Code

F.S.: Florida Statute

ISO: International Standards Organization

LAT: Latitude LONG: Longitude

MMBtu: million British thermal units

MW: Megawatt

ORIS: Office of Regulatory Information Systems

SOA: Specific Operating Agreement **UTM**: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where: 40 reference to Title 40

CFR reference to Code of Federal Regulations

60 reference to Part 60

60.334 reference to Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213, F.A.C.]

Where: 62 reference to Title 62

62-213 reference to Chapter 62-213

62-213.205 reference to Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97) (continued)

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

. Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by permit tracking database

001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185

PA95-01 AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC = old Air Construction Permit numbering

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DEC 2 A 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.P. Designated Representative

Attachment

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

DEP Form No. 62-210.900(1)(a)4. - Form

Effective _

Florida Department of Environmental Protection

Phase II NO_X Compliance Plan For more information, see instructions and refer to 40 CFR 76.9

	New R	evised				Page	1 of 3
STEP 1 Indicate plant name, state, and ORIS code from NADB, if applicable.	Plant Name	Crystal Ri	ver .		FL State	·	ė 628
STEP 2	type: "CB" for o	ell burner, "CY"	and Group 2 boile for cyclone, "DB t bottom. Indicat	W" for dry botto	om wall-fired, "T	for tangentially	Indicate boiler fired, "V" for
			T	<u> </u>	1-3		
		ID# 1	1D# 2	1D# -	1D# 5	ID#	ID#
		Туре	Type .	Туре	Туре	Туре	Туре
		T	Т	DBW	DBW		
(a) Standard annual average of limitation of 0.50 lb/mmBtu (for bottom wall-fired boilers)				X	X		
(b) Standard annual average of limitation of 0.45 lb/mmBtu (for tangentially fired boilers)			X				
(c) EPA-approved early election 40 CFR 76.8 through 12/31/07 above emission limit specifie	' (also indicate		\Box x	X	X		
(d) Standard annual average of limitation of 0.46 lb/mmBtu (for bottom wall-fired boilers)							
(e) Standard annual average e limitation of 0.40 lb/mmBtu (fo tangentially fired boilers)		X			. 🗆		
(f) Standard annual average e limitation of 0.68 lb/mmBtu (fo boilers)							
(g) Standard annual average e limitation of 0.86 lb/mmBtu (fo boilers)			·				
(h) Standard annual average e limitation of 0.80 lb/mmBtu (fo fired boilers)	or vertically						
(i) Standard annual average e limitation of 0.84 lb/mmBtu (fo boilers)							
(j) NO _x Averaging Plan (include form)	NO _x Averaging						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission I above for most stringent limits to any unit utilizing stack)							

					, ,	•*			
Р	lant Name (fr	om Step 1)	Crystal Ri	ver		Page 2	of 3		
,									
STEP 2, cont'd.		ID#	ID#	ID#	ID#	ID#	ID#		
•									
		Туре	Туре	Туре	Туре	Туре	Туре		
·									
(i) Common stack pursuant to 4 75.17(a)(2)(i)(B) with NO _x Averaging Plan box and NO _x Averaging Form)	ing (check			. 🗆					
(m) EPA-approved common stack apportionment method pt 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(ii (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 of demonstration period ongoing	or				. 🗆				
(p) Repowering extension plan a or under review	pproved								
STEP 3 Read the standard requirements and certification, enter the name of the designated representative, sign and dat		Standard Requirements <u>General.</u> This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Part of its Title V permit.							
assignated representative, orgin	2710 00101	Special Provisions for Early Election Units							
						ion plan shall be su xcept as provided u			
		for any violation	of the plan or 4	0 CFR 76.8 at tha		ved early election place and operators shall 0 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_x 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_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

DEP Form	No.	62-210.900(1)(a)4.	- Form
Effective			

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. <u>leffrey Pardue</u> , C.E.P.	
Signature # Date 12/19/97	



October 27, 1998

RECEIVED

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BUREAU OF AIR REGULATION

Mr. Scott Sheplak, P.E. Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

Re: FPC Crystal River Facility, Notice of Intent to Issue Title V Air Operation Permit

Revised Draft Title V Permit No. 0170004-004-AV

Enclosed please find the notarized proof of publication received from the Citrus County Chronicle for the Florida Department of Environmental Protection *Notice of Intent to Issue Title V Air Operation Permit* referenced to the above request. The notice was published on October 12, 1998.

If you should have any questions concerning this correspondence, please do not hesitate to contact me at (727) 826-4258.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

198 cc - Ed Svec

CC:

Bill Thomas, DEP SW District (w/attach)

Attachment

Proof Of Publication

from the

CITRUS COUNTY CHRONICLE

Crystal River, Citrus County, Florida PUBLISHED DAILY

STATE OF FLORIDA COUNTY OF CITRUS

Before the undersigned authority personally appeared FELICIA H. SATCHELL of the Citrus County Chronicle, a newspaper published daily at Crystal River, in Citrus County, Florida, that the attached copy of advertisement being a public notice in the matter of the

PERMIT NO.01	70004-004-AV/	CITRUS	_COUNTY
			_
Court, was published in	n said newspaper ir	n the issue	− ∋s
OCTOBER 12,19	998		_
			_

Affiant further savs that the Citrus County Chronicle is a newspaper published at Crystal River in said Citrus County, Florida, and that the said newspaper has heretofore been continuously published in Citrus County, Florida, each week and has been entered as second class mail matter at the post office in Inverness in said Citrus County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

The forgoing instrument was acknowledged before 12th day of OCT me this _____ by FELICIA H.SATCHELL

who is personally known to me and who did take an oath.

eastle And Charles Notary Public Notary Public, State of Florida Commission No. CC 669909

OFRO My Commission Exp. 08/16/2001 1-809-3-VOTARY - Fla. Notary Service & Bonding Co. Tunnecce communication and the contraction of the c 4401012 MCRN
PUBLIC NOTICE
OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
THE V Revised DRAFT Permit No.: 0170004-004-AV Crystal River Plant

The Department of Environmental Protection (permitting outhority) gives notice of its intent to issue a Title V oir operation permit to Seminole Electric Cooperative, inc., for the Crystal Tibler Protification west of U.S.: Highway 19, north of Crystal River, south of the Cross State Borge Conal, Clifus County. This permit incorporates the Phase (III NOx standards into Title IV Acid Rain Part pursuant to Rule 62-214.30 (6), Roida Administrative Code (F.A.C.). The applicant's name and address are: Roida Power Corporation. 3201–34th Street South, St. Petersburg, Roida 33711.

frame Code (FAC.). In appacall is natine and accress are, Rorida Power Corporation. 3201 34th Street South, St. Petersburg, Rorida 33711.

The permitting authority will issue Title V PROPOSED Permit, and subsequent Title V PINAL Permit, in accordance with the conditions of the Title V Revised DRAFI Permit unless a response received in accordance with the fotowing procedures results in a different decision or significant change of terms or conditions. The permitting authority will accept written comments concerning the proposed Title V Revised DRAFI Permit suance action for a period of 30 (thirty) days from the publication of this Notice, Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Bias Stone Road, Modi Station # 5505, Talahassee, Rorida 32399-2400. Any written comments field shall be made available for public inspection, if written comments received result in significant change in this Revised DRAFI Permit, the permitting outhority shall issue another Revised DRAFI Permit and require, if applicable, another Public Notice.

A person whose substantfal interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Section 120,599 and 120,57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #1, 35, Talathosse, Roida 32399-3000 (Felephone: 850/488-9730; Fax 850/488-9730; Fax 850/488-9730; Fax 850/488-9730; Fax 850/488-9730; Petitions filed by any persons other than those entitled to written notice under Section 120,0 (3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, 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 days of receipt of that notice, regardless of the date of publication. A peritioner shall mail a copy of the petition to the applicant at the address indicated above, of the time of filing. The falure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120,559 and 120,57; 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 of the Rolda Administrative Code (F.A.C.).

A petition that desputes the material facts on which the permitting authority's action is based must contribute the followers in within the open mitting authority's action is based must contribute. A person whose substantial interests are affected by the pro-

A petition that disputes the material facts on which the per-mitting authority's action is based must contain the following in-formation:

formation:

(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, 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 petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and whon 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 utilimate facts alleged as

(e) A concise statement of the utilimate facts alleged, as well as the rules and statutes which entitle petitioner to relet;

and

(f) A demand for relief.

A petition that does not dispute the material facts upon which the permitting outhorthy'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 28-106301, F.A.C.

same information as set forth above, as required by Rule 28106.301, FAC.

Because the administrative hearing process is designed to
formulate final agency action, the filting of a petition means than
the periting authority's final action may be different from the
position taken by it in this 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.

Mediction is not available for this proceeding. In addition to the above, pursuant to 42 Linted States Code
(U.S.C.) Section 7601 of (b) (2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of
the Administrator's 45 (forty-five) day review period as estabstand at 42 U.S.C. Section 7601 of (b) (1) to object to issuance
of any permit, Any petition shall be based only on objections to
the permit that were raised with reasonable specificity during
the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates the Administrator of the
EPA that it was impracticable to rose such objections within the
comment period, numbers.

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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.P. Designated Representative

Attachment

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

Florida Department of Environmental Protection

Phase II NO_X Compliance Plan For more information, see instructions and refer to 40 CFR 76.9

This submission is:	New R	evised				Page	1 of 3
STEP 1 Indicate plant name, state, and ORIS code from NADB, if applicable.	Plant Name	Crystal Ri	ver		FI State		÷ 628
	type: "CB" for c	ell burner, "CY"	ind Group 2 boiler for cyclone, "DB" t bottom. Indicat	W" for dry bottor	m wall-fired, "T	B, if applicable. In for tangentially do for each unit.	ndicate boiler fired, "V" for
		ID#	ID#	ID#	ID#	ID#	ID#
		Type	Type .	4 Type	5 Type	Туре	Type
		Т	Т	DBW	DBW	,,,,,	1) pc
(a) Standard annual average en limitation of 0.50 lb/mmBtu (fo bottom wall-fired boilers)				X	X		
(b) Standard annual average en limitation of 0.45 lb/mmBtu (fo tangentially fired boilers)			X				
(c) EPA-approved early electio 40 CFR 76.8 through 12/31/07 above emission limit specified	(also indicate		X	X	X		
(d) Standard annual average en limitation of 0.46 lb/mmBtu (fo bottom wall-fired boilers)							
(e) Standard annual average er limitation of 0.40 lb/mmBtu (fo tangentially fired boilers)		X					
(f) Standard annual average en limitation of 0.68 lb/mmBtu (for boilers)							
(g) Standard annual average er limitation of 0.86 lb/mmBtu (for boilers)	nission r cyclone						
(h) Standard annual average er limitation of 0.80 lb/mmBtu (for fired boilers)	r vertically						
(i) Standard annual average en limitation of 0.84 lb/mmBtu (for boilers)							
(j) NO _x Averaging Plan (include form)	NO _x Averaging						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission linal above for most stringent limitat to any unit utilizing stack)					·		

DEP Form No. 62-210.900(1)(a)4. - Form

Р	lant Name (fr	rom Step 1)	rystal Rive	er		Page 2 o	f 3
STEP 2, cont'd.							
.,		ID#	ID#	ID#	ID#	ID#	ID#
		Туре	Туре	Туре	Туре	Туре	Туре
			I				
(I) Common stack pursuant to 4 75.17(a)(2)(i)(B) with NO _x Averag the NO _x Averaging Plan box and NO _x Averaging Form)	ging (check						
(m) EPA-approved common stack apportionment method pu 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(ii (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 of demonstration period ongoing	or				. 🗆	,	
(p) Repowering extension plan a or under review	approved						
STEP 3 Read the standard requirements certification, enter the name of t designated representative, sign	he	Standard Requirements General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(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 _x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(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 76.8 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 _x 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_x for Phase II units with Group 1 boilers under 40

DEP Form No. 62-210.900(1)(a)4. - Form Effective ______

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	W. Joffrey	Pardue,	C.E.P.			
Signatu	thade			Date 12/19	/97	,

Ed Svec



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nr.T 3 n 1998

BUREAU OF AIR REGULATION

Mr. Scott Sheplak, P.E. Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

October 27, 1998

Re: FPC Crystal River Facility, Notice of Intent to Issue Title V Air Operation Permit

Revised Draft Title V Permit No. 0170004-004-AV

Enclosed please find the notarized proof of publication received from the Citrus County Chronicle for the Florida Department of Environmental Protection *Notice of Intent to Issue Title V Air Operation Permit* referenced to the above request. The notice was published on October 12, 1998.

If you should have any questions concerning this correspondence, please do not hesitate to contact me at (727) 826-4258.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

cc: Bill Thomas, DEP SW District (w/attach)

Attachment

riodi Ui rudiication

from the

BEST AVAILABLE COPY

CITRUS COUNTY CHRONICLE

Crystal River, Citrus County, Florida PUBLISHED DAILY

STATE OF FLORIDA COUNTY OF CITRUS

Before the undersigned authority personally appeared FELICIA H. SATCHELL

of the Citrus County Chronicle, a newspaper published daily at Crystal River, in Citrus County, Florida, that the attached copy of advertisement being a public notice in the matter of the

	_
PERMIT NO.0170004-004-AV/CITRUS	_ COUNTY
	_
Court, was published in said newspaper in the issue	- es
OCTOBER 12,1998	_
V	_

Affiant further says that the Citrus County Chronicle is a newspaper published at Crystal River in said Citrus County, Florida, and that the said newspaper has heretofore been continuously published in Citrus County, Florida, each week and has been entered as second class mail matter at the post office in Inverness in said Citrus County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

The forgoing instrument was acknowledged before 12th day of OCT by FELICIA H.SATCHELL

who is personally known to me and who did take an oath.

earthy of the first the same Notary Public Strain

Notary Public, State of Florida
Commission No. CC 669909
My Commission Exp. 08/16/2001 Notary Public, State of Florida

1-609-3.00TARY - Fla. Nothry Service & Bonding Co. 20

STATE OF FLORIDA DEPARTMENT OF BNVIRONMENTAL PROTECTION Title V Revised DRAFT Permit No.: 0170004-004-AV Crystal River Plant

Citrus County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation (permit to 5 Seminal Beactric Cooperative, inc. for the Crystal River, south of the Cross State Barge Canal, Citrus County. This intent incorporates the Prose I/II NOx standards into Title V Acid Rain Part pursuant to Rule 62-214.360 (6). Rotida Administrative Code (FAC.). The applicant's name and address are: Rotida Power Corporation, 3201 34th Street South, St. Peterburg, Rotida State II River, Rotida Rain Part pursuant to Rule 62-214.360 (6). Rotida Administrative Code (FAC.). The applicant's name and address are: Rotida Power Corporation, 3201 34th Street South, St. Peterburg, Rotida 33111.

The permitting outhority will ssue Title V PROPOSED Permit, and subsequent Title V Rival Permit, in accordance with the conditions of the Title V Revised DRAFT Permit unless a response reasks of in accordance with the foz-wing procedures results in a different decision or significant change of terms or conditions. The permitting authority will accept withten comments concerning the proposed Title V Revised DRAFT Permit Issuance action for a period of 30 (thirty) days from the publication of this Notice. Written comments should be provided to the Department's Bursou of Air Regulation, 2600 Biair Stone Road, Mail Station # 5505. Talchassee, Rotida 32399-2400. Any written comments filed shall be made available for public Inspection. If written comments received result in significant change in this Revised DRAFT Permit in the permitting authority shall issue another Public Notice.

A person whose substantial interests are affected by the pro-

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Section 120.59 and 120.57 of the Rorda Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in Office of General Counsel of the Department of Environmental Protection. 3900 Commonwealth Boulevard, Mail Station # 35, Toliahassee, Rorda 32399-3000 (releptione: 850/488-9730, Fox 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60 (3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, 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 days of receipt of that notice, reparaless of the other 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 fature of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.59 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervenion will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Rorda Administrative Code (F.A.C.). A person whose substantial interests are affected by the pro-

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

formation:

(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, name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the cause of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and whon the petitioner received notice of the agency action ar 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, as well as the rules and statutes which entitle petitioner to relief.

and
(f) A demand for relief.
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.

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 token by it in this 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.

Medicition is not analysis for the contraction for the proceeding.

with the requirements set forth above.

Mediation is not available for this proceeding.
In addition to the above, pursuant to 42 United States Cade
(U.S.C.) Section 7661 d (b) (2), any person may petition the Administrator of the EPA within 60 (skty) days of the expiration of
the Administrator's 45 (farty-five) day review period as established at 42 U.S.C. Section 7661 d (b) (1), to object to issuance
of any permit. Any petition shall be based only an objections to
the permit that were roised with reasonable specificity cluring
the 30 (thirty) day public comment period provided in this nofice, unless the petitioner demonstrates the 'Administrator of the
EPA that it was impracticable to raise such objections within the
comment period or unless the grounds for such objection arrase EPA that if was improacticable to rake 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 7661 d (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.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through fitday, except legal holidays at:

through Friday, except legal holidays at:

Permitting Authority:

Affected District/Local Program
Department of Environmental Protection

Department of Environmental Protection
Surreau of Air Regulation
Southwest District Office
South Magnolfa Drive, Suite 4
4807 Lourel Fair Circle
Tallohassee, Florida 32301
Tallohassee, Florida 32301
Telephone: 850/486-1344
Fax: 850/922-6979
Fax: 813/744-6084



November 12, 1997

Mr. Scott M. Sheplak, P.E. Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Re:

Florida Power Corporation, Crystal River Facility DRAFT Title V Permit No. 0170004-004-AV

Dear Mr. Sheplak:

On behalf of Florida Power Corporation (FPC), attached are comments regarding the DRAFT Title V permit for the Crystal River Facility, as identified above. FPC appreciates the Department's efforts in processing this permit and understands the need to resolve these issues in as timely a manner as possible. In this regard, DEP agreed to grant FPC's Request for Extension of Time until December 8, 1997. If we are unable to reach a resolution of these comments within this time period, we would appreciate the opportunity to file an additional Request for Extension of Time. Accordingly, please contact me at (813) 866-5158 as soon as you have had a chance to review these comments to set up either a telephone or in-person conference. Thank you again for your consideration of our comments.

Sincerely, J. Mala Jay for

Scott H. Osboum,

Senior Environmental Engineer

CC:

Clair Fancy, P.E., DEP Joseph Kahn, P.E. DEP

Ken Kosky, P.E., Golder Associates

Robert Manning, HGS&S

FLORIDA POWER CORPORATION COMMENTS ON DRAFT TITLE V PERMIT CRYSTAL RIVER FACILITY

General Comments

- 1. FPC understands that Appendix TV-1, Title V Conditions, is expected to be revised within the next few weeks. FPC requests that its Title V permit reflect the most up-to-date version of this Appendix.
- 2. FPC understands that DEP will publish the Intent to Issue Title V Air Operation Permit. Because the applicant is ultimately responsible for the publication of the Intent to Issue, FPC requests that DEP provide a copy of the Notice intended to be published, as well as proof of publication.

Section I., Facility Information, Subsection A.

1. FPC requests the following revisions to the description to reference FPC's authorization at Crystal River to burn new and used-oil: "This facility consists of four coal-fired fossil fuel steam generating (FFSG)"

Section I., Facility Information, Subsection B.

1. FPC requests that the following activity be added to the chart describing the Unregulated Emissions Units and/or Activities: "Two 3500 kW diesel generators associated with Unit 3." These units were included in Appendix U-1, but were inadvertently not included in subsection B.

Section II., Facility-wide Conditions.

1. Condition 3. For clarity and to make this Condition specific to FPC's Crystal River Plant, FPC requests that Condition 3. be edited as follows:

Except as otherwise provided in this permit 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

Also, because the reference to Chapter 62-297 in the last sentence of Condition 2. appears to be misplaced, FPC requests Condition 2. be edited as follows: "EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C."

- 2. Condition 6. In the context of this permit, how does DEP intend to respond to EPA's comments regarding the need to change the phrase "exempt" to "insignificant"?
- 3. Condition 7. For clarity, FPC requests that the first sentence of this Condition be edited as follows: "The permittee shall not allow no person to store, pump,"

4. Condition 8. For clarity, FPC requests that this Condition be revised as follows: "... Reasonable precautions to prevent emissions of unconfined particulate matter at this facility shall may include, as needed:"

Section III. Subsection A.

- 1. FPC requests that the descriptions for Units 1 and 2 each include a reference to FPC's authorization to burn on-spec used oil in these units.
- 2. Condition A.6. For clarification and to correspond with FPC's Title V application, FPC requests that this Condition be revised as follows: "Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, 3-hour average, as measured in accordance with Condition A.9. by applicable compliance methods.
- 3. Condition A.10 and A.11. The first sentence in Condition A.11. is redundant to language in Condition A.10. and should therefore be deleted. The second sentence in Condition A.11. should be move into Condition A.10. as follows: " . . . the permittee may demonstrate compliance using fuel sampling and analysis. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. If the permittee elects to discontinue fuel sampling and analysis"
 - 4. Condition A.13. FPC requests that the annual test date be changed to July 1st.
- 5. Conditions A.15. This Condition should be revised to mirror the provisions associated with burning used oil in FPC's other Title V permits, as discussed between FPC and DEP on September 24, 1997.

Section III. Subsection B.

- 1. Condition B.8. FPC performs annual RATA testing for the NOx and SO_2 monitors at full load on Units 4 and 5. The test results are obtained by performing instrumental Methods 7E and 6C, respectively. Therefore, FPC requests that the Title V permit allow the use of these test results as the annual compliance demonstrations. Note that the RATA tests may not necessarily be performed during the 60 day period prior to the compliance test date, however they are performed at approximately 12-month intervals.
- 2. Condition B.11. The reference to Condition B.3. at the end of this Condition should be changed to Condition B.1.
 - 3. Condition B.12. FPC requests that the annual test date be changed to October 1st.
- 4. Conditions B.15 through B.17. The requirement for PM2.5 monitoring has no basis in rules or the previous site certification. FPC understands that the EPA will be funding a national PM2.5 monitoring program, so this monitoring will be the responsibility of the EPA and DEP. These conditions should not be considered as part of the Title V permit, since the monitoring was a requirement of the site certification application only. In fact, the original PSD permit did not involve DEP, but was issued by the EPA. The monitoring was part of the continuation of the monitoring performed prior to the site certification being issued. Over the years, the monitoring was reduced

from four to two stations. FPC requests that the requirement for these monitoring stations be deleted.

Section III. Subsection E.

The provisions governing the operation of these relocatable generators when they are located at the Crystal River facility should be essentially identical to the provisions contained in the Title V permits for Bartow, Anclote, and Higgins. Accordingly, FPC requests the following revisions: (1) the description should be revised to state "These relocatable units will have a maximum combined heat input of 25.74 mmBtu/hr while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum combined rating of 2460 kilowatts," (2) add a new Condition E.1. to state "These conditions become active and enforceable once FPC has given notification to the Department's Southwest District Office, in accordance with Condition E.16., that a unit(s) will be relocated to this facility.", (3) the permit references in Conditions E.4., E.5., E.9., E.11., E.12., E.13., E.14., and E.15. should be to the AC instead of the AO, (4) in Condition E.13., the third line should be revised as follows: "of operation expressed as "engine-hours," and a cumulative total hours of operation expressed as "engine-hours" for each month.", (5) Condition E.15. should be deleted because it imposes no requirements on the source, and (6) the last sentence in Condition E.16. ("If a diesel generator is to be relocated within Pinellas County) should be deleted because the Crystal River facility is not located in Pinellas County (similarly, the reference to Pinellas County in Condition E.12. should be deleted as well.)

Section III. Subsection F.

- 1. Condition F.1. The seawater flow was never characterized in the PSD permit as a maximum. It is described as "approximately" 735,000 gpm in the descriptive language at the beginning of the construction permit. FPC requests that the adjective "maximum" be deleted.
- 2. Condition F.2. The amount of hours was not previously expressed as a 12 month rolling total. This is not an effective way to characterize their operation as the cooling towers are operated the most during the high ambient temperature months.
- 3. Condition F.3. FPC requests that the permit "Note" be deleted to avoid the <u>basis</u> of the limit being confused and imposed as independent limits. Further, the purpose of including this Note is unclear; if an understanding of the basis for the PM limit is needed, the BACT determination can simply be referred to.
- 4. Condition F.5. FPC requests that the language in the second sentence be changed to "Testing shall be conducted on one cell, selected by the <u>owner in consultation with the Department</u>, of ..."
- 5. Condition F.6. FPC requests that the language in the first sentence be changed to require testing by June 30, 1998.

n III. Subsection G.

- 1. Condition G.1. The flow rate listed should be described as "per cooling tower".
- 2. Condition G.4. FPC requests that the testing window for both cooling towers be ed to the period between May 1 and October 1. This will avoid the times of year in which unit es normally occur.

n III. Subsection H.

- 1. In the "Permitting note(s)," FPC requests the following clarification: "This emissions regulated partially under Power Plant Siting Certification PA77-09; NSPS 40 CFR 60 Subpart ts 4 and 5 only); and PSD permit AC 09-162037, PSD-FL-139."
- 2. Condition H.6. For clarification, FPC requests the following revisions: "This ions unit is also subject to conditions I.1 through I.15, except for I.3, I.5, I.7 and I.8 (conditions d I.4 are also not applicable to activities at units subject to NSPS 40 CFR 60 (i.e., activities at 4 and 5)), contained in Subsection I. Common Conditions."
- 3. Condition H.7. For clarification, FPC requests the following revisions: "These ions units are also subject to conditions <u>J.1, J.2, J.3(b)</u>, (c) and (d) and J.4 contained in ction J. NSPS Common Conditions." [Ken J.1 seems to be a judgement call; J.2 ins the excess emissions provisions, so you definitely want it included.]

on III. Subsection I.

- 1. Because many of the requirements under this subsection are superseded by more ic conditions in Subsections A. H., FPC requests the following revision to the introductory age of this subsection: "Except as otherwise specified under Subsections A. through H., the ing conditions apply to the emissions units listed above:"
- 2. Condition I.3. For clarification, FPC requests the following revision: "(This condition s to emissions units 001 and 002 Units 1 and 2, and therefore supersedes condition I.2.)"

on III. Subsection J.

1. For clarification, FPC requests the following revision to the description "016 Material ing activities for coal-fired steam units 4 and 5."

on IV. Acid Rain Part

- 1. Condition A.1.a. should reference the actual application that FPC submitted rather DEP's form number.
- 2. Conditions A.4. and B.2. This condition imposes no requirements and therefore dipendented.

Secti chane outag Section unit is Y <u>(Ur</u>, emiss I.2 ar Units emiss subst conta Secti speci langt follov applie Secti hand Sect: than . shou

Appendix E-1, List of Exempt Emissions Units and/or Activities

1. FPC requests the following additions and revisions to this list: (1) Vehicle diesel and gasoline <u>refueling and storage</u> tanks. (2) <u>Grounds maintenance</u>.

Appendix S. Permit summary Tables] Table 1-1

1. FPC requests that these Tables be revised to reflect the requested revisions in comments above.





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BUREAU OF AIR REGULATION

November 6, 1998

Scott M. Sheplak, P.E. Administrator, Title V Section Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

Re: Comments on Revised Draft Title V Permit; Crystal River Facility, Citrus County File No. 0170004-004-AV

This letter serves to provide comments on the above-referenced permit received by Florida Power Corporation (FPC) on October 5, 1998. The issues discussed are addressed in the same order in which they are encountered in the draft permit.

Statement of Basis

- 1. Several places in the Statement of Basis (page 1, second paragraph and page 2, last paragraph) refer to Crystal River Unit 3 as a fossil fuel steam generator. Unit 3 is a nuclear unit.
- 2. On page 2, last paragraph, the adjective "maximum" describing the seawater flow, should be revised to "approximately" to be consistent with earlier comments and changes made under Section III, Subsection F.
- 3. In the next to last paragraph in the Statement of Basis, the text refers to "emissions of particulate matter and PM...". The PM should be referred to as PM_{10} .
- 4. The references to the relocatable diesel fired generators should be revised to more accurately describe them. More detail on the suggested revisions is presented below in the comments under Section III, Subsection E.

Section III. Subsections A and B.

- 1. Conditions A.1 and B.1 refer to the heat input numbers as "Permitted" Capacity. In order to be consistent with the unit descriptions directly above each respective condition, FPC requests that the phrase "Rated" Capacity be used.
- 2. Condition B.11 Record Heat Input should be deleted, as it contradicts the language regarding heat input under the permit's *Statement of Basis*.
- 3. Condition B.15 Ambient Air Monitoring refers to the monitoring of "total" suspended particulate or TSP. TSP is no longer an applicable standard and is, therefore, no longer being monitored. In order to more accurately describe the monitoring of PM₁₀ and PM_{2.5}, FPC requests that the word "total" be deleted so that the phrase reads "suspended particulate."

Section III. Subsection E.

- 1. As has been requested in other FPC permits that reference these relocatable diesel generators, FPC requests that they simply be referred to as diesel generators in the generic sense. As long as the original fuel flow and engine-hour limits are retained, various combinations of diesel generators may be used. Therefore, FPC requests the following revision to the description: "These relocatable emission units—are Caterpillar Model 3508DITA 820 kilowatt diesel generators. The will have a maximum combined heat input of 25.74 million Btu per hour (MMBtu/hr) while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum combined rating of 2460 kilowatts." Revisions should also be made to the source description in condition E.1, Section I (page 24), Subsection A (page 2) and Section I, Subsection I (page 33).
- 2. The reference to the future FPC Polk County Site (page 24) should be changed to the Hines Energy Complex.

Section III. Subsection I.

The excess emissions regulations are confusing and we appreciate the Department's continuing efforts to provide clarity when applying them as a specific condition in a Title V permit. The intent of FPC's original comment was simply to clarify that Condition I.2. only be applied to Units 1 and 2 for purposes of malfunctions, because Condition I.3. applied to Units 1 and 2 for purposes of startup and shutdown. The only deficiency in the Department's suggested language for Condition I.3 is that it does not provide for excess emissions due to soot blowing and load changes. FPC requests that this be provided.

FPC appreciates the Department's efforts in processing this permit and understands the need to resolve these issues in as timely a manner as possible. In this regard, the Department agreed to grant FPC's Request for Extension of Time until November 12, 1998. If we are

S. Sheplak November 6, 1998 Page 3

unable to reach a resolution of these remaining issues within this time period, we intend to file an additional Request for Extension of Time. Accordingly, please contact me at (727) 826-4258 as soon as you have had the opportunity to review these comments.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

CC:

Clair Fancy, P.E., DEP Joseph Kahn, P.E., DEP

Ken Kosky, P.E., Golder Associates

Robert Manning, HGS&S



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OCT 15 1998

BUREAU OF AIR REGULATION

October 12, 1998

Mr. Scott Sheplak, P.E. Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

Re: Status of Title V Permits

As you know, a meeting was held on August 28, 1998 between the Department and Mr. Scott Osbourn of my staff. The purpose of the meeting was to resolve several pending Title V issues in order to advance these permits to the "proposed" stage as expeditiously as possible. Based upon the meeting, the following is a brief summary of FPC's understanding and position regarding the status of several of FPC's Title V permits.

El , 1. Bartow facility (DRAFT Title V Permit No. 1030011-002-AV)

FPC received the Intent to Issue Title V Air Operation Permit and draft Title V permit for the Bartow facility on October 6, 1997. Following several extensions of time and discussions with the Department, FPC filed a Petition for Administrative Hearing on April 30, 1998 (Petition). The primary issue involved in this Petition is whether FPC is required to retain an electrostatic precipitator (ESP) associated with Unit 1, although there are numerous other less contentious permit issues that also require resolution.

As detailed in FPC's November 11, 1997 comment letter and FPC's Petition filed April 30, 1998, FPC maintains that there is no factual or legal basis to require FPC to retain and operate the electrostatic precipitator (ESP) associated with Bartow Unit 1. However, in an effort to move the Title V permitting process forward, FPC is willing to accept a permit that requires that the ESP be retained and used. In exchange for accepting such a requirement, FPC requests the inclusion of additional permit language to clarify this unique situation. Specifically, the ESP utilized at the Bartow facility was not designed to be operated during fuel oil firing (i.e., the ESP was designed based on the use of a coal/oil mixture (COM) fuel). The ESP is also reaching the end of its anticipated design life. Therefore, significant capital investment will be required to continue its operation. Also, because this unit is oil-fired, the ESP is not needed to assure compliance with the applicable particulate matter limits. FPC requests that the statement of basis for the Bartow Title V

permit recognize these facts, in order to ensure that the Credible Evidence rule and the Compliance Assurance Monitoring (CAM) rule, to the extent they may be triggered for Unit 1, are appropriately implemented. Specifically, the final CAM rule (40 CFR Part 64.2(b)(ii), Control Devices Criterion) applies only to pollutant-specific emissions units that rely on a control device to achieve compliance. In this regard, FPC requests that the description/statement of basis for Unit 1 be revised as follows:

Unit 1 is a Particulate matter emissions are controlled by a General Electric Services, Inc. Model 1-BAB1.2X37(9)36.0-434-4.3P electrostatic precipitator (ESP) consisting of five fields in depth. This ESP was designed to operate when utilizing a coal/oil mixture, which is no longer burned by FPC. Moreover, because Unit 1 is oil-fired, this unit is capable of meeting the applicable particulate matter and opacity limits in Conditions A.7 and A.8 without the use of the ESP and, therefore, the provisions of 40 CFR Part 64 do not apply.

In addition, FPC submitted an application to the Department requesting a permit amendment for modification of the fly ash collection system associated with the ESP. The Department has responded that this request is acceptable and that operating permits AO52-233149 and -232464 (for Unit 1 and the fly ash system, respectively) will be amended. Therefore, several Title V conditions relating to operation of the fly ash system will need to be revised. The current request for an extension of time in which to file a petition for an administrative hearing expires on October 15, 1998. In order to properly address the above issues, FPC has requested a further extension until November 15, 1998.

2. **Anclote facility** (Draft Title V Permit No. 1010017-003-AV)

Although there are several issues involved with this permit, the provision regarding used oil appears to be the primary issue. This permit is under Petition for Administrative Hearing with DOAH, to which we currently have an extension of time until December 1, 1998. In order to withdraw its Petition for Administrative Hearing, FPC needs to receive a document from DEP reflecting revised language to which both parties agree.

In this regard, FPC has provided DEP with additional data regarding how other states have authorized facilities to utilize on-specification used oil. None of the examples found thus far have expressed any concern regarding lead emissions; in fact, the lead criteria for "on-specification" used oil was established at a level expressly designed to protect the National Ambient Air Quality Standard for lead.

3. **DeBary facility** (Draft Title V permit No. 1270028-001-AV)

FPC understands that the issues involved with this permit were resolved at our August 28, 1998 meeting. As requested by the Department during our meeting, attached is a summary of combustion turbine operating hours for 1997 and 1998. We appreciate the Department's efforts to reach this agreement and look forward to withdrawing our Petition for Administrative Hearing after receiving a document from the Department reflecting the revised conditions.

FPC Comments October 13, 1998 Page 3



4. Crystal River facility (Draft TitleV Permit No. 1270020-001-AV)

FPC received a revised draft permit from the Department on October 5, 1998, and the issues involved with this permit have largely been resolved. The *Notice of Intent to Issue Title V Permit* was published on October 12, 1998. In order to properly review the revised draft permit, FPC has requested an extension of time in which to file a petition for an administrative hearing until November 12, 1998.

Periodic Monitoring

By letter dated August 27, 1998 (attached), FPC requested specific language to be added to FPC's permits regarding heat input. FPC specifically reiterates this request for the four permits discussed above. FPC has still not finalized its position on other periodic monitoring issues.

Thank you for your attention and cooperation in issuing Title V permits to FPC's facilities. If the above information is not consistent with your understanding, or we need to discuss any of these issues or deadlines further, please contact either Mr. Scott Osbourn at (727) 826-4258 or me at (727) 826-4301 at your earliest convenience. Again, it is FPC's desire to advance these Title V permits to the "final" stage as expeditiously as possible.

Sincerely,

W. Jeffrey Pardue, C.E.P.

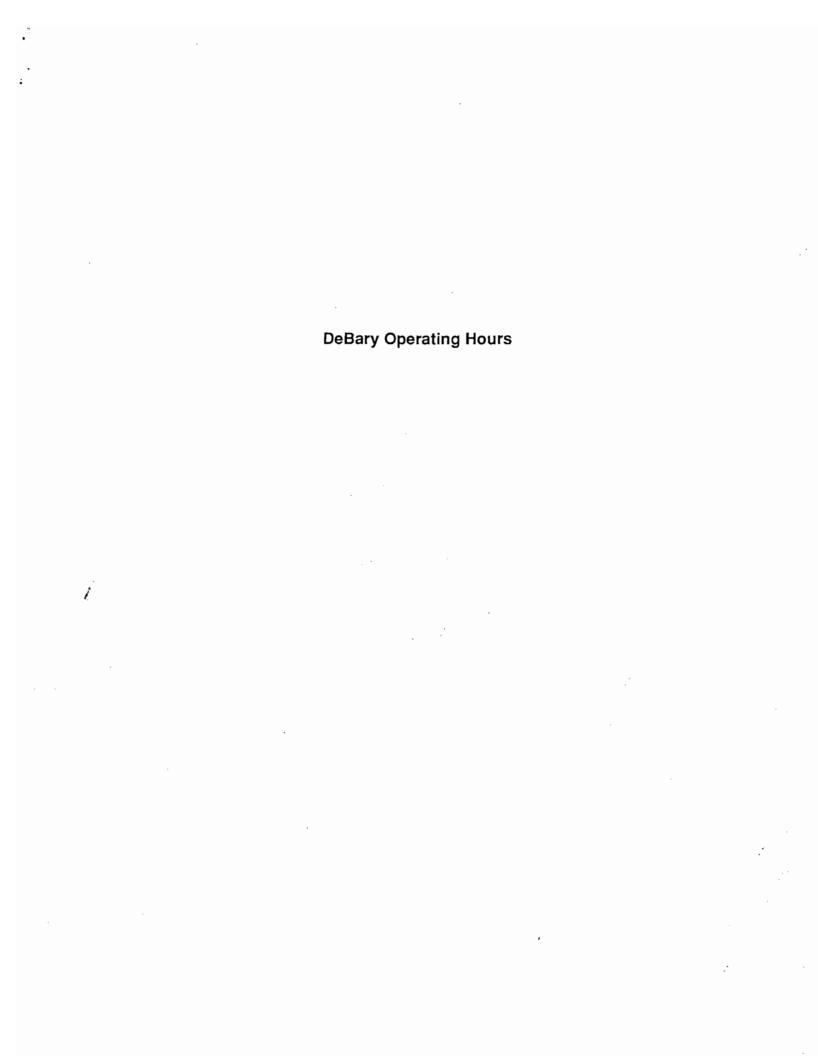
Director, Environmental Services

FPC Responsible Official

Attachments

cc: Clair Fancy, DEP BAR

Robert Manning, Esq., HGS&S Ken Kosky, P.E., Golder Assosiates



Author: Wilson B. Hicks Jr. at east/o=FLORIDA POWER/c=US/a=MCI/p=FLPROG Date: 8/31/98 12:08 PM Priority: Normal

Receipt Requested

TO: Scott H. Osbourn at goc, openmail

Subject: DEBARY P7-P10 1997 AND 1998 OPERATING HOURS

SCOTT:

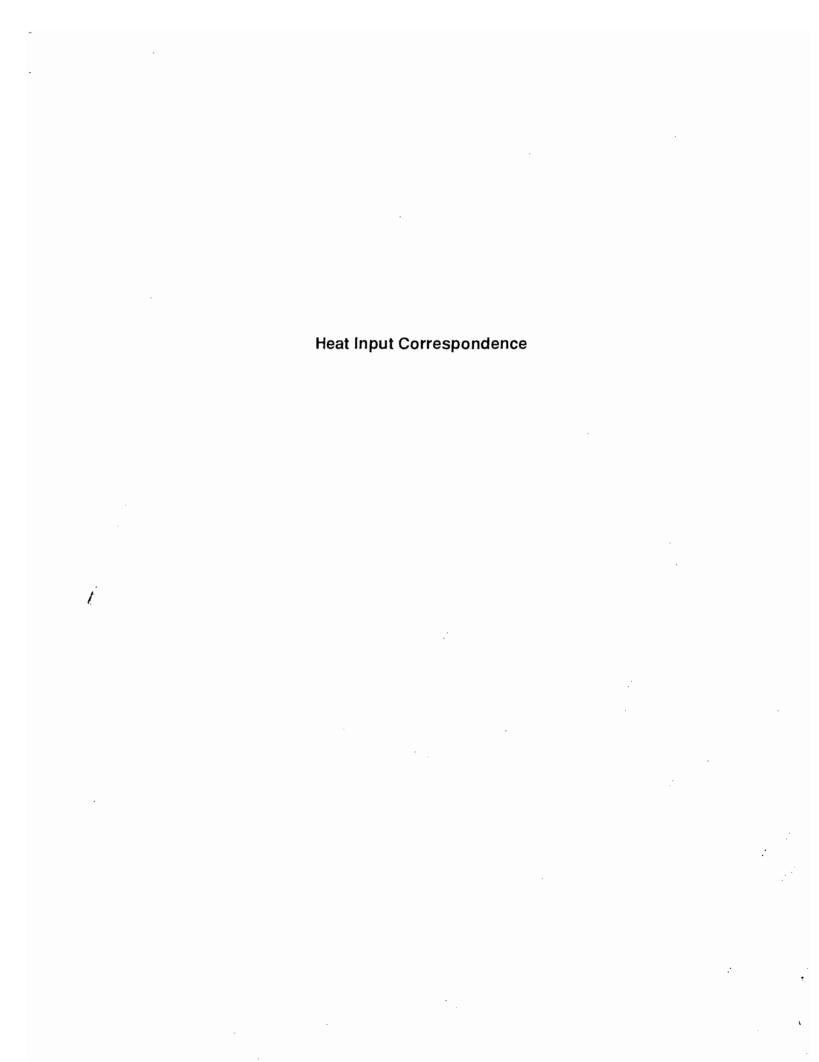
PER YOUR REQUEST, HERE ARE THE HOURS:

YEAR	1997	1998
P-7	1817	1453
P-8	870	673
P-9	1722	1393
P-10	822	676

IF YOU NEED ANY ADDITIONAL INFORMATION, PLEASE, LET ME KNOW.

WILSON

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BEST AVAILABLE COPY

J. M. Kennedy J. L. Tillman

File: Title V Periodic Monitoring k:\user\sosbourn\1998\heatinpu.doc 927-616000-AIR



August 27, 1998

Mr. Clair Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Re: Periodic Monitoring in Title V Permits: Heat Input Limits

As you know, a meeting was held between the EPA, the Department and utility representatives at the Florida Electric Power Coordinating Group (FCG) offices on July 14, 1998. The purpose of the meeting was to discuss the periodic monitoring requirements of 40 CFR 70.6(a)(3)(i) as applied to Title V permits. The meeting presented an opportunity for all parties to represent their views, and it was clear that there remains considerable disagreement as to the proper application of the periodic monitoring guidance.

In addition to the July 14, 1998 meeting, FPC has also reviewed DEP's March 10, 1998 letter to EPA (Re: Proposed Changes to FPL Proposed Title V Permits to Satisfy EPA Objections). FPC has still not formalized its position on periodic monitoring, including all of the issues raised in the March 10, 1998 letter. However, the resolution outlined in the March 10th letter regarding heat input limitations appears to be reasonable and one that FPC is willing to accept. This resolution required adding a note to the "permitted capacity" condition for each Title V permit, and an explanation that regular record keeping is not required for heat input. Specifically, the Department stated that they would add the following language to the statement of basis:

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 emissions limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. 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 process variables for emissions 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

Mr. Fancy August 27, 1998 Page 2

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.

Also, the Department added the following language to each permit condition titled Permitted Capacity:

(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.)

Accordingly, FPC requests that this language regarding heat input be added to all of FPC's Title V permits currently being processed by the Department. FPC intends to notify the Department as soon as possible after formalizing its position on the remainder of periodic monitoring issues. If you should have any questions concerning the above, please do not hesitate to contact me at (727) 826-4258.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

cc: Robert Manning, HGS&S



Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallanassee, Florida 32399-2400

Virginia B. Wetherell Secretary

FAX TRANSMITTAL SHEET

TO: _	Scott	Osbourn						
DATE:	11/23/	148	· ————		FHONE:	727/5	326-4216	·
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FROM:		SCOTT M. SHI ADMINIST TITLE V S	RATOR	Ξ .				
	DIVISION OF AIR MAIL STATION # 2600 BLAIR ST	ONMENTAL PROTECTION RESOURCES MANAGE	N FAX: MENT SHEPLAK_	: (850) 488-13 : (850) 922-69 E-M. S@DEP.STATE.FI WEB S :://www.dep.state.	079 AIL: US ITE: .			
	Pe: KPC-	-Crystil R	uver					
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PHONE	: (850)4/	13-9198	Saidy	<u> </u>		FAX NUMB	ER: 904/922-	- 6·979

If there are any problems with this fax transmittal, please call the above phone number.

[Date]

Mr. W. Jeffery Pardue Director, Environmental Services Department Florida Power Corporation 3201 34th Street South St. Petersburg, Florida 33711

Re:

PROPOSED Title V Permit No.: 0170004-004-AV

Crystal River Plant

Dear Mr. Pardue:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Crystal River Plant located west of U. S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County, is enclosed. This letter is only a courtesy to inform you that the Revised DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is http://www2.dep.state.fl.us/air.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Edward J. Svec at 850/921-8985.

Sincerely,

C. H. Fancy, P.E. Chief Bureau of Air Regulation

CHF/s

Enclosures

copy furnished to:

Mr. Kennard Kosky, PE, Golder Associates

Mr. Scott Osbourn, Florida Power Corporation

Mr. Bill Thomas, PE, FDEP, SWD

Ms. Gracy R. Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 0170004-004-AV

Page 1 of 4

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Florida Power Corporation for the Crystal River Plant located at located west of U. S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County was clerked on September 29, 1998. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Citrus County Chronicle on October 12, 1998. The Revised DRAFT Title V Air Operation Permit was available for public inspection at the Department's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on October 30, 1998.

II. Public Comment(s).

Comments were received and the Revised DRAFT Title V Operation Permit was changed. The comments were not considered significant enough to reissue the Revised DRAFT Title V Permit and require another Public Notice. Comments were received from one respondent during the 30 (thirty) day public comment period. Listed below is each comment letter in the chronological order of receipt and a response to each comment in the order that the comment was received. The comments will not be restated. Where duplicative comments exist, the original response is referenced.

A. Letter from Mr. Scott Osbourn dated November 6, 1998, and received on November 9, 1998.

Statement of Basis

- **1.R:** Crystal River Unit 3 will be referred to as a nuclear unit.
- 2.R: Seawater flow in the last paragraph of page 2 will be described as "approximately".
- **3.R:** The next to last paragraph will refer to particulate matter and PM₁₀.
- **4.R:** See the response to comments under **Section III**, **Subsection E**.

The Statement of Basis is not an enforceable document and is not required to be revised. However, we have made these changes to clear the record.

Section III. Subsections A. and B.

5.R: The Department disagrees with the comment. The requested change would not be consistent with other permits already issued.

PROPOSED Permit No.: 0170004-004-AV

Page 2 of 4

6.R: The Department disagrees with the comment. Heat input determinations for all fuels must be made and recorded in order to determine the allowable emissions rates for sulfur dioxide and nitrogen oxides as required by 40 CFR 60 Subpart D. The condition will remain as noticed.

7.R: The Department disagrees with the comment. Unless Florida Power Corporation will commit to monitor for PM_{10} and/or $PM_{2.5}$, the condition will remain as noticed. This condition is the exact requirement of the Power Plant Site Certification.

Section III. Subsection E.

8.R: The Department disagrees with the comment. The relocatable emergency generators were permitted under a Federally enforceable permit and they are no specific restrictions on how they may be operated. The permit allows either one, two or all three of the generators to be operated at the approved locations. The descriptions of the generator(s) and the specific conditions as they relate to the generator(s) were taken from this permit. The conditions and descriptions for this emissions unit will remain as noticed.

9.R: The Department agrees with the comment. As a result, the following change is made:

From: These relocatable emissions units are Caterpillar Model 3508-DITA 820 kilowatt diesel generators. The generators may be relocated at 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. The future FPC Polk County Site, County Road 555, 1 mi. southwest of Homeland, Polk County.

To: These relocatable emissions units are Caterpillar Model 3508-DITA 820 kilowatt diesel generators. The generators may be relocated at 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.

PROPOSED Permit No.: 0170004-004-AV

Page 3 of 4

Section III. Subsection I.

10.R: Soot blowing and load change is addressed in specific condition A.5. However, the condition did not address the requirements that best operational practices be followed and their duration be minimized. As a result, the following change will be made:

From: A.5. <u>Visible Emissions - Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

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

To: A.5. <u>Visible Emissions - Soot Blowing and Load Change</u>. 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), 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.]

The enclosed PROPOSED Title V Air Operation Permit includes the aforementioned changes to the DRAFT Title V Air Operation Permit.

PROPOSED Permit No.: 0170004-004-AV

Page 4 of 4

B. Format Changes:

The following format changes were made in order to reflect current documents, addresses or to provide consistency with other permits:

- 1. Appendix TV-1, and all references to it throughout the permit, was replaced with new document TV-2, dated November 10, 1998.
- 2. The address for EPA in Facility-wide Condition 10. was updated.
- 3. Specific compliance dates referenced in specific conditions A.13., B.12., C.5., D.4., E.10., F.6., and G.4. were removed because Rule 62-297.310(7), F.A.C., requires that tests be conducted during the Federal Fiscal Year, not a specific date. These dates are referenced in Table 2-1

C. Document(s) on file with the permitting authority:

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

III. Conclusion.

The permitting authority hereby issues the PROPOSED Permit No.: 0170004-004-AV, with any changes noted above.

Because of the number of changes to the DRAFT, a copy of the PROPOSED permit has been printed for the applicant.



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. W. Jeffery Pardue Director, Environmental Services Department Florida Power Corporation 3201 34th Street South St. Petersburg, Florida 33711

ORDER EXTENDING PERMIT EXPIRATION DATE

Crystal River Plant, Facility ID No.: 0170004

Section 403.0872(2)(b), Florida Statutes (F.S.), specifies that any facility which submits to the Department of Environmental Protection (Department) a timely and complete application for a Title V permit "is entitled to operate in compliance with its existing air permit pending the conclusion of proceedings associated with its application."

Section 403.0872(6), F.S., provides that a proposed Title V permit which is not objected to by the United States Environmental Protection Agency (EPA) "must become final no later than fifty five (55) days after the date on which the proposed permit was mailed" to the EPA.

Pursuant to the Federal Acid Rain Program as defined in Rule 62-210.200, Florida Administrative Code (F.A.C.), all Acid Rain permitting must become effective on January 1 of a given year.

This facility, which will be permitted pursuant to Section 403.0872, F.S., (Title V permit) will be required to have a permit effective date subsequent to the final processing date of the facility's Title V permit.

To prevent misunderstanding and to assure that the above identified facility continues to comply with existing permit terms and conditions until its Title V permit becomes effective, it is necessary to extend the expiration date(s) of its existing valid permit(s) until the effective date of its Title V permit. Therefore, under the authority granted to the Department by Section 403.061(8), F.S., IT IS ORDERED:

- 1. The expiration date(s) of the existing valid permit(s) under which the above identified facility is currently operating is (are) hereby extended until the effective date of its permit issued pursuant to Section 403.0872, F.S., (Title V permit);
- 2. The facility shall comply with all terms and conditions of its existing valid permit(s) until the effective date of its Title V permit;
- 3. The facility will continue to comply with the requirements of Chapter 62-214, F.A.C., and the Federal Acid Rain Program, as defined in Rule 62-210.200, F.A.C., pending final issuance of its Title V permit.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Crystal River Plant, Facility ID No.: 0170004

Page 2 of 4

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S.

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 (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this Order. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this Order, 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 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 indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and,
- (f) A demand for relief.

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 Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this Order.

Crystal River Plant, **Facility ID No.:** 0170004 Page 3 of 4

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, MS35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this	day of, 1998, in Tallahassee, Florida
	TATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Н	OWARD L. RHODES, Director

Division of Air Resources Management Twin Towers Office Building Mail Station 5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400 850/488-0114 Crystal River Plant, **Facility ID No.:** 0170004 Page 4 of 4

CERTIFICATE OF SERVICE

The undersigned duly designated depo were sent by certified mail before the clos		s that this order and all copies to the person(s) listed
Mr. W. Jeffery Pardue Mr. Bill Thomas, PE, FDEP, SWD		
	Clerk Stamp	
	FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.	
	(Clerk)	(Date)



RECEIVED

NOV 09 1998

BUREAU OF AIR REGULATION

November 6, 1998

Scott M. Sheplak, P.E. Administrator, Title V Section Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

Re: Comments on Revised Draft Title V Permit; Crystal River Facility, Citrus County File No. 0170004-004-AV

This letter serves to provide comments on the above-referenced permit received by Florida Power Corporation (FPC) on October 5, 1998. The issues discussed are addressed in the same order in which they are encountered in the draft permit.

Statement of Basis

- 1. Several places in the Statement of Basis (page 1, second paragraph and page 2, last paragraph) refer to Crystal River Unit 3 as a fossil fuel steam generator. Unit 3 is a nuclear unit.
- 2. On page 2, last paragraph, the adjective "maximum" describing the seawater flow, should be revised to "approximately" to be consistent with earlier comments and changes made under Section III, Subsection F.
- 3. In the next to last paragraph in the Statement of Basis, the text refers to "emissions of particulate matter and PM...". The PM should be referred to as PM_{10} .
- 4. The references to the relocatable diesel fired generators should be revised to more accurately describe them. More detail on the suggested revisions is presented below in the comments under Section III, Subsection E.

Section III. Subsections A and B.

- 1. Conditions A.1 and B.1 refer to the heat input numbers as "Permitted" Capacity. In order to be consistent with the unit descriptions directly above each respective condition, FPC requests that the phrase "Rated" Capacity be used.
- 2. Condition B.11 Record Heat Input should be deleted, as it contradicts the language regarding heat input under the permit's *Statement of Basis*.
- 3. Condition B.15 Ambient Air Monitoring refers to the monitoring of "total" suspended particulate or TSP. TSP is no longer an applicable standard and is, therefore, no longer being monitored. In order to more accurately describe the monitoring of PM₁₀ and PM_{2.5}, FPC requests that the word "total" be deleted so that the phrase reads "suspended particulate."

Section III. Subsection E.

- 1. As has been requested in other FPC permits that reference these relocatable diesel generators, FPC requests that they simply be referred to as diesel generators in the generic sense. As long as the original fuel flow and engine-hour limits are retained, various combinations of diesel generators may be used. Therefore, FPC requests the following revision to the description: "These relocatable emission units—are Caterpillar Model 3508DITA-820 kilowatt diesel generators. The will have a maximum combined heat input of 25.74 million Btu per hour (MMBtu/hr) while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum combined rating of 2460 kilowatts." Revisions should also be made to the source description in condition E.1, Section I (page 24), Subsection A (page 2) and Section I, Subsection I (page 33).
- 2. The reference to the future FPC Polk County Site (page 24) should be changed to the Hines Energy Complex.

Section III. Subsection I.

The excess emissions regulations are confusing and we appreciate the Department's continuing efforts to provide clarity when applying them as a specific condition in a Title V permit. The intent of FPC's original comment was simply to clarify that Condition I.2. only be applied to Units 1 and 2 for purposes of malfunctions, because Condition I.3. applied to Units 1 and 2 for purposes of startup and shutdown. The only deficiency in the Department's suggested language for Condition I.3 is that it does not provide for excess emissions due to soot blowing and load changes. FPC requests that this be provided.

FPC appreciates the Department's efforts in processing this permit and understands the need to resolve these issues in as timely a manner as possible. In this regard, the Department agreed to grant FPC's Request for Extension of Time until November 12, 1998. If we are

S. Sheplak November 6, 1998 Page 3

unable to reach a resolution of these remaining issues within this time period, we intend to file an additional Request for Extension of Time. Accordingly, please contact me at (727) 826-4258 as soon as you have had the opportunity to review these comments.

Sincerely,

Scott H. Osbourn

Senior Environmental Engineer

CC:

Clair Fancy, P.E., DEP Joseph Kahn, P.E., DEP

Ken Kosky, P.E., Golder Associates

Robert Manning, HGS&S

STATEMENT OF BASIS

Title V PROPOSED Permit No.: 0170004-004-AV
Florida Power Corporation
Crystal River Plant
Citrus County

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.

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 and 2 and Nuclear Unit 3; coal-, fly ash-, and bottom ash-handling facilities, and three relocatable diesel fired generators. 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, this facility is a major source of hazardous air pollutants (HAPs).

Emissions units are as follows:

FFSG 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. 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. FFSG Unit 1 began commercial operation in 1966. FFSG Unit 2 began commercial operation in 1969. FFSG Unit 1 is a Phase II NO_X unit and FFSG Unit 2 is a Phase I/II Early election NO_X unit.

FFSG 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. These emissions units are regulated under Acid Rain, Phase I and II and Rule 62-210.300, F.A.C., Permits Required and are subject to 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. FFSG Unit 4 began commercial operation in 1982. FFSG Unit 5 began commercial operation in 1984. FFSG Units 4 and 5 are Phase I/II Early election NO_X units.

Emissions unit 006 is a fly ash transfer (Source 1) from 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

Statement of Basis Florida Power Corp., Crystal River Plant Page 2 of 3

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.

Emissions units 006, 008, 009 and 010 are regulated under Best Available Control Technology (BACT), Determinations ordered 2/5/79 (proposed 1/26/79) and 8/16/79.

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. These emissions units are regulated under 62-296.320, F.A.C., and by applicable requirements of AC 09-235915.

Emissions Unit 012 is three relocatable diesel fired generators, each rated at 0.82 MW and 8.58 MMBtu/hr while being fueled by 62.1 gallons of new No. 2 fuel oil per hour, with emissions exhausted through a separate 15 ft. stack. These relocatable generators are Caterpillar Model 3508-DITA 820 kilowatt diesel generators. These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack.

Emissions unit 013 is cooling towers for FFSG Units 1 and 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 seawater flow rate of approximately 735,000 gallons per minute for all cells combined, with a design airflow rate of 1.46 x 10⁶ 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. 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%.

Statement of Basis Florida Power Corp., Crystal River Plant Page 3 of 3

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 are controlled by high efficiency drift eliminators. Seawater flow rate is 331,000 gallons per minute. 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.)

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, not addressed by other emissions units. Emissions are particulate matter and PM₁₀ from these activities. This emissions unit is regulated partially under Power Plant Siting Certification PA77-09; NSPS 40 CFR 60 Subpart Y; and, PSD permit AC 09-162037, PSD-FL-139.

The heat input limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions 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. A note below the permitted capacity condition clarifies this. 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 emissions unit was tested. Rule 62-297.310(5),F.A.C., included in the permit, requires measurement of 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.

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BUREAU OF AIR REGULATION

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THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application for Permit by:

OGC CASE NO.:

FDEP Revised Draft Permit No.: 1070004-004-AV

Florida Power Corporation Crystal River Plant, Citrus County, Florida

REQUEST FOR EXTENSION OF TIME

By and through undersigned counsel, Florida Power Corporation (FPC) hereby requests, pursuant to Florida Administrative Code Rule 62-110.106(4), an enlargement of time, to and including November 12, 1998, in which to file a Petition for Administrative Proceedings in the above-styled matter. As good cause for granting this request, FPC states the following:

- 1. On or about October 9, 1997, FPC received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Draft Permit No. 1070025-001-AV) for the FPC Crystal River located in Citrus County, Florida. FPC subsequently filed several extensions of time, until November 1, 1998, to preserve its right to file a Petition for Administrative Proceeding on this permit.
- 2. On or about October 5, 1998, FPC received from the Department an "Intent to Issue Title V Air Operation Permit" (REVISED Draft Permit No. 1070004-004-AV) for the FPC Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program.
- 3. The Department's cover letter to the Revised permit states that the initial Draft Title V permit is withdrawn. In reliance on this representation, FPC hereby files this Request for Extension of Time on the Revised Draft permit, and understands that no further extensions of time

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are needed to preserve its rights in relation to the initial Title V permit because it has been effectively withdrawn. Nonetheless, insofar as the initial Draft Title V permit may be determined to still be in effect, FPC respectfully requests that this Request for Extension of Time apply to both the initial and the Revised Draft Title V permits.

- 4. Based on FPC's review, the Revised Draft permit and associated documents contain several provisions that warrant clarification or correction.
- 5. This request is filed simply as a protective measure to avoid waiver of FPC's right to challenge certain conditions contained in the Revised Draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and hopefully avoid the need to file a petition and proceed to a formal administrative hearing.

WHEREFORE, FPC respectfully requests that the time for filing of a Petition for Administrative Proceedings in regard to the Department's Intent to Issue Title V Air Operation Permit for Revised Draft Permit No. 1070004-004-AV be formally extended to and including November 12, 1998.

Respectfully submitted this $\frac{19}{2}$ day of October, 1998.

HOPPING GREEN SAMS & SMITH, P.A.

Robert A. Manning

Fla. Bar No. 0035173

123 South Calhoun Street

Post Office Box 6526

Tallahassee, FL 32314

(850) 222-7500

Attorneys for FLORIDA POWER CORPORATION

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S. Mail on this ______ day of October, 1998:

Clair H. Fancy, P.E., Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Jeff Brown, Esq.
Department of Environmental Protection
Room 669
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ed Svec
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attorney

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

El Drec 10/15/58

FLORIDA POWER CORPORATION (CRYSTAL RIVER PLANT),

Petitioner,

vs.

OGC CASE NO. 97-1777

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Crystal River Plant), to grant an extension of time to file a petition for an administrative hearing on Application No. 0170004-004-AV. Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until November 1, 1998, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this _____ day of October, 1998, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director Florida Power Corporation 3201 Thirty-fourth St. South St. Petersburg, Florida 33733

on this $\frac{150}{100}$ day of October, 1998.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS BEASON

Assistant General Counsel Florida Bar No. 0843430

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



September 30, 1998

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

Draft Permit No. 0170004-004-AV

On October 9, 1997, Florida Power Corporation (FPC) received the above-referenced intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including November 1, 1998, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely.

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Jeffrey Brown, DEP OGC

RECEIVED

THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NCT 26 1998

In the Matter of an Application for Permit by:

OGC CASE NO.:

BUREAU OF AIR REGULATION

Florida Power Corporation Crystal River Plant, Citrus County, Florida FDEP Revised Draft Permit No.: 1070004-004-AV

REQUEST FOR EXTENSION OF TIME

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- 1. On or about October 9, 1997, FPC received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Draft Permit No. 1070025-001-AV) for the FPC Crystal River located in Citrus County, Florida. FPC subsequently filed several extensions of time, until November 1, 1998, to preserve its right to file a Petition for Administrative Proceeding on this permit.
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- 3. The Department's cover letter to the Revised permit states that the initial Draft Title V permit is withdrawn. In reliance on this representation, FPC hereby files this Request for Extension of Time on the Revised Draft permit, and understands that no further extensions of time

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- 4. Based on FPC's review, the Revised Draft permit and associated documents contain several provisions that warrant clarification or correction.
- 5. This request is filed simply as a protective measure to avoid waiver of FPC's right to challenge certain conditions contained in the Revised Draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and hopefully avoid the need to file a petition and proceed to a formal administrative hearing.

WHEREFORE, FPC respectfully requests that the time for filing of a Petition for Administrative Proceedings in regard to the Department's Intent to Issue Title V Air Operation Permit for Revised Draft Permit No. 1070004-004-AV be formally extended to and including November 12, 1998.

Respectfully submitted this $\frac{19}{2}$ day of October, 1998.

HOPPING GREEN SAMS & SMITH, P.A.

Robert A. Manning

Fla. Bar No. 0035173 123 South Calhoun Street

Post Office Box 6526

Tallahassee, FL 32314

(850) 222-7500

Attorneys for FLORIDA POWER CORPORATION

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S. Mail on this ______ day of October, 1998:

Clair H. Fancy, P.E., Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Jeff Brown, Esq.
Department of Environmental Protection
Room 669
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ed Svec
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attorney

EL -G1+-

THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application for Permit by:

OGC CASE NO.:

FDEP Revised Draft Permit No.: 0170004-004-AV

Florida Power Corporation Crystal River Plant, Citrus County, Florida

REQUEST FOR EXTENSION OF TIME

By and through undersigned counsel, Florida Power Corporation (FPC) hereby requests, pursuant to Florida Administrative Code Rule 62-110.106(4), an enlargement of time, to and including December 1, 1998, in which to file a Petition for Administrative Proceedings in the above-styled matter. As good cause for granting this request, FPC states the following:

- 1. On or about October 9, 1997, FPC received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Draft Permit No. 0170004-004-AV) for the FPC Crystal River located in Citrus County, Florida. FPC subsequently filed several extensions of time, until November 1, 1998, to preserve its right to file a Petition for Administrative Proceeding on this permit.
- 2. On or about October 5, 1998, FPC received from the Department an "Intent to Issue Title V Air Operation Permit" (REVISED Draft Permit No. 0170004-004-AV) for the FPC Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. FPC recently filed a Request for Extension of Time, until November 12, 1998.
- 3. The Department's cover letter to the Revised Draft permit states that the initial Draft Title V permit is withdrawn. In reliance on this representation, FPC hereby files this Request for

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Extension of Time on the Revised Draft permit, and understands that no further extensions of time are needed to preserve its rights in relation to the initial Title V permit because it has been effectively withdrawn. Nonetheless, insofar as the initial Draft Title V permit may be determined to still be in effect, FPC respectfully requests that this Request for Extension of Time apply to both the initial and the Revised Draft Title V permits.

- 4. Based on FPC's review, the Revised Draft permit and associated documents contain several provisions that warrant clarification or correction.
- 5. This request is filed simply as a protective measure to avoid waiver of FPC's right to challenge certain conditions contained in the Revised Draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and hopefully avoid the need to file a petition and proceed to a formal administrative hearing.

WHEREFORE, FPC respectfully requests that the time for filing of a Petition for Administrative Proceedings in regard to the Department's Intent to Issue Title V Air Operation Permit for Revised Draft Permit No. 0170004-004-AV be formally extended to and including December 1, 1998.

Respectfully submitted this $9\frac{1}{2}$ day of November, 1998.

HOPPING GREEN SAMS & SMITH, P.A.

Conney

Robert A. Manning

Fla. Bar No. 0035173

123 South Calhoun Street

Tallahassee, FL 32314

(850) 222-7500

Attorneys for FLORIDA POWER CORPORATION

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S.

Mail on this 9th day of November, 1998:

Clair H. Fancy, P.E., Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Jeff Brown, Esq.
Department of Environmental Protection
Room 669
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ed Svec
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attorney

Ed Svec

RECEIVED

THE STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF

BUREAU OF AIR REGULATION

In the Matter of an Application for Permit by:

OGC CASE NO.:

FDEP Revised Draft Permit No.: 0170004-004-AV

Florida Power Corporation Crystal River Plant, Citrus County, Florida

REQUEST FOR EXTENSION OF TIME

By and through undersigned counsel, Florida Power Corporation (FPC) hereby requests, pursuant to Florida Administrative Code Rule 62-110.106(4), an enlargement of time, to and including December 1, 1998, in which to file a Petition for Administrative Proceedings in the above-styled matter. As good cause for granting this request, FPC states the following:

- 1. On or about October 9, 1997, FPC received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Draft Permit No. 0170004-004-AV) for the FPC Crystal River located in Citrus County, Florida. FPC subsequently filed several extensions of time, until November 1, 1998, to preserve its right to file a Petition for Administrative Proceeding on this permit.
- 2. On or about October 5, 1998, FPC received from the Department an "Intent to Issue Title V Air Operation Permit" (REVISED Draft Permit No. 0170004-004-AV) for the FPC Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. FPC recently filed a Request for Extension of Time, until November 12, 1998.
- 3. The Department's cover letter to the Revised Draft permit states that the initial Draft

 Title V permit is withdrawn. In reliance on this representation, FPC hereby files this Request for

Extension of Time on the Revised Draft permit, and understands that no further extensions of time are needed to preserve its rights in relation to the initial Title V permit because it has been effectively withdrawn. Nonetheless, insofar as the initial Draft Title V permit may be determined to still be in effect, FPC respectfully requests that this Request for Extension of Time apply to both the initial and the Revised Draft Title V permits.

- 4. Based on FPC's review, the Revised Draft permit and associated documents contain several provisions that warrant clarification or correction.
- 5. This request is filed simply as a protective measure to avoid waiver of FPC's right to challenge certain conditions contained in the Revised Draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and hopefully avoid the need to file a petition and proceed to a formal administrative hearing.

WHEREFORE, FPC respectfully requests that the time for filing of a Petition for Administrative Proceedings in regard to the Department's Intent to Issue Title V Air Operation Permit for Revised Draft Permit No. 0170004-004-AV be formally extended to and including December 1, 1998.

Respectfully submitted this 9th day of November, 1998.

HOPPING GREEN SAMS & SMITH, P.A.

Conney

Robert A. Manning

Fla. Bar No. 0035173

123 South Calhoun Street

Tallahassee, FL 32314

(850) 222-7500

Attorneys for FLORIDA POWER CORPORATION

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S.

Mail on this 9th day of November, 1998:

Clair H. Fancy, P.E., Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Jeff Brown, Esq.
Department of Environmental Protection
Room 669
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ed Svec
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attorney

Ed Svec

RECEIVED

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOV 19 1998

BUREAU OF AIR REGULATION

FLORIDA POWER CORPORATION (CRYSTAL RIVER PLANT),

Petitioner.

vs.

OGC CASE NO. 97-1777

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Crystal River Plant), to grant an extension of time to file a petition for an administrative hearing on Application No. 0170004-004-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until December 31, 1998, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 13 day of November, 1998, in Tallahassee, Florida.

> STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Géneral Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director Florida Power Corporation 3201 Thirty-fourth St. South St. Petersburg, Florida 33733

__ day of November, 1998.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS BEASON Assistant General Counsel

Florida Bar No. 0843430

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application for Permit by:

OGC CASE NO.:

FDEP Revised Draft Permit No.: 1070004-004-AV

Florida Power Corporation Crystal River Plant, Citrus County, Florida

REQUEST FOR EXTENSION OF TIME

By and through undersigned counsel, Florida Power Corporation (FPC) hereby requests, pursuant to Florida Administrative Code Rule 62-110.106(4), an enlargement of time, to and including November 12, 1998, in which to file a Petition for Administrative Proceedings in the above-styled matter. As good cause for granting this request, FPC states the following:

- 1. On or about October 9, 1997, FPC received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Draft Permit No. 1070025-001-AV) for the FPC Crystal River located in Citrus County, Florida. FPC subsequently filed several extensions of time, until November 1, 1998, to preserve its right to file a Petition for Administrative Proceeding on this permit.
- 2. On or about October 5, 1998, FPC received from the Department an "Intent to Issue Title V Air Operation Permit" (REVISED Draft Permit No. 1070004-004-AV) for the FPC Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program.
- 3. The Department's cover letter to the Revised permit states that the initial Draft Title V permit is withdrawn. In reliance on this representation, FPC hereby files this Request for Extension of Time on the Revised Draft permit, and understands that no further extensions of time

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are needed to preserve its rights in relation to the initial Title V permit because it has been effectively withdrawn. Nonetheless, insofar as the initial Draft Title V permit may be determined to still be in effect, FPC respectfully requests that this Request for Extension of Time apply to both the initial and the Revised Draft Title V permits.

- 4. Based on FPC's review, the Revised Draft permit and associated documents contain several provisions that warrant clarification or correction.
- 5. This request is filed simply as a protective measure to avoid waiver of FPC's right to challenge certain conditions contained in the Revised Draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and hopefully avoid the need to file a petition and proceed to a formal administrative hearing.

WHEREFORE, FPC respectfully requests that the time for filing of a Petition for Administrative Proceedings in regard to the Department's Intent to Issue Title V Air Operation Permit for Revised Draft Permit No. 1070004-004-AV be formally extended to and including November 12, 1998.

Respectfully submitted this 19 day of October, 1998.

HOPPING GREEN SAMS & SMITH, P.A.

Robert A. Manning

Fla. Bar No. 0035173

123 South Calhoun Street

Post Office Box 6526

Tallahassee, FL 32314

(850) 222-7500

Attorneys for FLORIDA POWER CORPORATION

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S. Mail on this $\frac{1}{2}$ day of October, 1998:

Clair H. Fancy, P.E., Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Jeff Brown, Esq.
Department of Environmental Protection
Room 669
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ed Svec
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attorney



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BUREAU OF AIR REGULATION

November 25, 1998

Ms. Kathy Carter, Clerk Office of General Counsel Florida Department of Environmental Protection Room 638 3900 Commonwealth Blvd. Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110,106(4), to and including February 1, 1999, in which to file a Petition for Administrative Proceedings in the abovestyled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Ed Drec 17.14/93

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION (CRYSTAL RIVER PLANT),

Petitioner,

vs.

OGC CASE NO. 97-1777

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Crystal River Plant), to grant an extension of time to file a petition for an administrative hearing on Application No. 0170004-004-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until February 1, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this day of December, 1998, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM
General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director Florida Power Corporation 3201 Thirty-fourth St. South St. Petersburg, Florida 33733

on this day of December, 1998.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

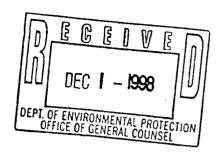
W. DOUGLAS BEAKON

Assistant General Counsel Florida Bar No. 0843430

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



November 25, 1998



Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including February 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Ed Succ



January 27, 1999

RECEIVED

JAN 29 1999

BUREAU OF AIR REGULATION

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 63&
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE:

Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including April 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.F.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Ed Svec



March 18, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

RECEIVED

MAR 26 1999

BUREAU OF AIR REGULATION

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. These issues may result in the issuance of another REVISED Draft permit. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including June 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

out A. Sanning

CC:

Scott Sheplak, DEP

3/30/89

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION (CRYSTAL RIVER PLANT),

Petitioner,

vs.

OGC CASE NO. 97-1777

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Crystal River Plant), to grant an extension of time to file a petition for an administrative hearing on Application No. 0170004-004-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until June 1, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 3 day of March, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F. PERRY ODOM Seneral Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P.
Director
Florida Power Corporation
3201 Thirty-fourth St. South
St. Petersburg, Florida 33733

on this day of March, 1999.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS BEASON Assistant Ceneral Counsel Florida Bar No. 379239

Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-9314



March 18, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE:

Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit, REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. These issues may result in the issuance of another REVISED Draft permit. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including June 1, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smlth

A. Nanning

CC:

Scott Sheplak, DEP Jeffrey Brown, DEP OGC

GENERAL OFFICE: 32

33771 - (813) 868-515

Ed Ivec

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION (CRYSTAL RIVER PLANT),

Petitioner,

vs.

OGC CASE NO. 97-1777

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Crystal River Plant), to grant an extension of time to file a petition for an administrative hearing on Application No. 0170004-004-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until August 2, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 8th day of June, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

' I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director Florida Power Corporation 3201 Thirty-fourth St. South St. Petersburg, Florida 33733

on this day of June, 1999.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS BEASON
Assistant General Counsel

Florida Bar No. 379239

Mail Station 35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314



May 27, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. These issues may result in the issuance of another REVISED Draft permit. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including August 2, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Doug Beason, DEP OGC

P.

Scott Steplak

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA POWER CORPORATION (CRYSTAL RIVER PLANT),

Petitioner,

vs.

OGC CASE NO. 97-1777

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,

Respondent.

ORDER GRANTING REQUEST FOR EXTENSION OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Florida Power Corporation (Crystal River Plant), to grant an extension of time to file a petition for an administrative hearing on Application No. 0170004-004-AV. See Exhibit 1.

Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until August 2, 1999, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 8th day of June, 1999, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

F PERRY ODOM General Counsel

Douglas Building, MS #35 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-9314

CERTIFICATE OF SERVICE

' I CERTIFY that a true copy of the foregoing was mailed to:

W. Jeffrey Pardue, C.E.P. Director Florida Power Corporation 3201 Thirty-fourth St. South St. Petersburg, Florida 33733

on this day of June, 1999.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. DOUGLAS BEASON

Assistant General Counsel Florida Bar No. 379239

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May 27, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Crystal River Plant

REQUEST FOR EXTENSION OF TIME on the Intent to Issue Title V Air Operation Permit,

REVISED Draft Permit No. 0170004-004-AV

On October 5, 1998, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit (REVISED Draft Permit No. 0170004-004-AV) for the Crystal River Plant. The Department issued this Revised Draft based on progressing negotiations and the need to include additional applicable requirements pursuant to the Acid Rain program. A review of the permit conditions has revealed that several issues remain to be resolved. These issues may result in the issuance of another REVISED Draft permit. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including August 2, 1999, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, Environmental Services Department

Title V Responsible Official

Robert A. Manning, Esq.

Hopping Green Sams & Smith

CC:

Scott Sheplak, DEP

Doug Beason, DEP OGC

P.

Florida Power Corporation Crystal River Plant Facility ID No.: 0170004 Citrus County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 0170004-004-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

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Department of Environmental Protection

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

Virginia B. Wetherell Secretary

Permittee:

Florida Power Corporation 3201 34th Street South St. Petersburg, FL 33711 PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004 SIC Nos.: 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Crystal River Plant. 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 TV-2, Title V Conditions (version dated 11/10/98)

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 Plan received 12/22/95

Phase I Acid Rain permit dated 3/27/97

Alternate Sampling Procedure: ASP Number 97-B-01

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

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)

Best Management Plan, KBN, November 1990

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

Order Dated xx/xx/xx Extending Permit Expiration Date

Effective Date: January 1, 2000

Renewal Application Due Date: July 5, 2004

Expiration Date: December 31, 2004

Howard L. Rhodes, Director Division of Air Resources Management

HLR/sms/es

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 3; coal-, fly ash-, and bottom ash-handling facilities, and three relocatable diesel fired generators. 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, this facility is a major source of hazardous air pollutants (HAPs).

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

Brief Description	
Fossil Fuel Steam Generator (FFSG), Unit 1	
FFSG, Unit 2	
FFSG, Unit 4	
FFSG, Unit 5	
Fly ash transfer (Source 1) from FFSG Unit 1	
Fly ash storage silo (Source 3) for FFSG Units 1 and 2	
Fly ash transfer (Source 5) from FFSG Unit 2	
Fly ash transfer (Source 5) from FFSG Unit 2	
Bottom ash storage silo for FFSG Units 1 and 2, with associated vacuum blower exhausts and	
bin vent filter (total of three emission points)	
Three relocatable diesel fired generators, rated at 0.82 MW, 8.58 MMBtu/hr	
Cooling towers for FFSG Units 1, 2, and 3, used to reduce plant discharge water temperature	
Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature	
Material handling activities for coal-fired steam units	

Unregulated Emissions Units and/or Activities		
017	Fuel and lube oil tanks and vents	
018	O18 Sewage treatment, water treatment, lime storage	
019	Two 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

These documents are on file with the permitting authority: Initial Title V Permit Application received June 14, 1996
Phase II NOX Compliance Plan dated December 19, 1997.
Phase I Acid Rain permit dated March 27, 1997.
Revision to Permit Application received April 17, 1998
Letter received November 9, 1998, from Mr. Scott Osbourn.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-2, TITLE V CONDITIONS is a part of this permit. {Permitting note: APPENDIX TV-2, 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.** <u>Prevention of Accidental Releases (Section 112(r) of CAA).</u> If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
- b. certification forms and/or RMPs according to the promulgated rule schedule. [40 CFR 68]
- **5.** <u>Unregulated Emissions Units and/or Activities.</u> 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. <u>Insignificant Emissions Units and/or Activities.</u> 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.

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- 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.]

- 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]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C., (condition 58. of APPENDIX TV-2, TITLE V CONDITIONS.)}

- 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 Compliance Section

61 Forsyth Street

Atlanta, GA 30303 Phone: 404/562-9099

Fax: 404/562-9095

11. 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 No. 52., Appendix TV-2, Title V Conditions}

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

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID		1
No.	Brief Description	
001	Fossil Fuel Steam Generator, Unit 1, a tangentially fired unit, rated at 440.5 MW, 3750 MMBtu/hr, capable of burning bituminous coal and used oil, with number 2 fuel oil as a startup fuel, with emissions 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, capable of burning bituminous coal and used oil, with number 2 fuel oil as a startup fuel, with emissions 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.

{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
002	4795	Bituminous Coal

[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.}

- **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 fuel allowed to be burned is bituminous coal, with the exception that number 2 fuel oil may be used as an ignitor fuel. 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.15** of this permit.

[Rule 62-213.410, F.A.C., 0170004-002-AO and 0170004-005-AO]

Emission Limitations and Standards

- **A.4.a.** <u>Visible Emissions Emissions Unit 001</u>. Visible emissions shall not exceed 40 percent opacity. 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.** <u>Visible Emissions Emissions Unit 002</u>. Visible emissions shall not exceed 20 percent opacity, 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. <u>Visible Emissions Soot Blowing and Load Change</u>. 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), 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. <u>Particulate Matter</u>. 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.]
- **A.8.** <u>Sulfur Dioxide</u>. When burning coal, sulfur dioxide emissions shall not exceed 2.1 pounds per million Btu heat input.

[Rules 62-213.440, F.A.C. and PPSC PA 77-09]

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. 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

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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.11.** 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.10** and **A.12**. [Rule 62-296.405(1)(f)1.b., F.A.C.]
- **A.12.** <u>Sulfur Dioxide Fuel Sampling</u>. 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:
 - 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 SO₂ 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.13.** 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.14.** 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.15.** 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:

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- 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.16. These emissions units are also subject to conditions I.1 through I.15 contained in Subsection I. Common Conditions.

A.17. These emissions units are also subject to condition K.1 contained in Subsection K. Used Oil Common Condition.

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 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 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.

{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
003	6665	Bituminous Coal

[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.}

- **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, 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 except for one six-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42(a)(1) & (2)]

B.5. 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) derived from liquid fossil fuel.
- (2) 520 nanograms per joule heat input (1.2 lb per million Btu) 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:

$$PS_{SO2} = [y(340) + z(520)]/(y+z)$$

where:

PS_{SO2} 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.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 NO₂ in excess of:
- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel.
- (3) 300 nanograms per joule heat input (0.70 lb per million Btu) 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:

$$PS_{NOx} = \underline{x(86)+y(130)+z(300)}$$

 $x+y+z$

where:

PS_{NOx} = 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]

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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_2 , and NO_x standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, SO_2 , or NO_x 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_2 = oxygen concentration, percent dry basis.

 F_d = 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_2 concentration (% O_2). The O_2 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_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
- (iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 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 SO₂ 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_2 concentration (% O_2). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 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_x concentration.
- (i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
- (ii) For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.
- (iii) The NO_x emission rate shall be computed for each pair of NO_x and O_2 samples. The NO_x emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

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- (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_2 and NO_x may be determined by using the Fc 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).

 $%CO_2$ = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c 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_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
- (A) When F_0 is less than 0.97 F_{0a} , then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
- (B) When F_0 is less than 0.97 F_{0a} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if Fo is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , 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 °C (320 °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 SO₂ 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 SO₂ (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 SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).

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- (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 O_2 concentration (% 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 NOx and SO₂ 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]

Monitoring of Operations

B.10. 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.11.** Record Heat Input. The owner or operator shall make and maintain records of the heat input to the boiler from all fuels at all times to demonstrate compliance with specific condition **B.3** of this permit. [Rules 62-4.070(3) and 62-213.440, F.A.C.]
- **B.12.** Annual Tests Required PM, VE, SO₂ and NOx. 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.13. Pursuant to 40 CFR 60.45 Emission Monitoring.

CMS for Opacity, SO₂, NOx, and CO₂ 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:

[In parts per million]

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Fossil fuel	Span value for	Span value for
	sulfur dioxide	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:

 $E = CF[20.9/(20.9-percent O_2)]$

where:

E, C, F, and % O₂ 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:

 $E = CF_c [100/percent CO_2]$

where:

- E, C, F_c and %CO₂ 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 4.15×10^4 M ng/dscm per ppm (2.59×10^{-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 CO₂ /J (1,810 scf CO₂ /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, 0.322×10^{-7} scm CO_2 /J (1,200 scf CO_2 /million Btu) for propane, and 0.338×10^{-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 Fc factor (scm CO2 /J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_c factors specified in 40 CFR 60.45(f)(4):

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

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

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

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

where:

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

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 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]

Excess Emission Reports.

- (g) Excess emission reports shall be submitted to the <u>Department</u> 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) <u>Nitrogen oxides</u>. 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.14. 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.15. Ambient Air Monitoring. The owner or operator shall continue to operate the existing ambient monitoring devices for sulfur dioxide and total 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 total 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

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[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.16. 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.17.** 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.18. These emissions units are also subject to conditions J.1 through J.5 contained in Subsection J. NSPS Common Conditions.
- B.19. 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.

E.U. ID	· .
No.	Brief Description
006	Fly ash transfer (Source 1) from Fossil Fuel Steam Generator (FFSG) Unit 1.
800	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:

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

[Rules 62-4.160(2), F.A.C. 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:

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

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.
- 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 rule 62-297, F.A.C.

[Rule 62-297.620(4), F.A.C., 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., 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., AC 09-256791]

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.

E.U. ID	
No.	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).

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. <u>Permitted Capacity</u>. The transfer rates shall not exceed 16 tons per hour (8 tons per hour from each FFSG unit).

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

Emission Limitations and Standards

- **D.2.** <u>Visible Emissions (VE) Limitation</u>. Visible emissions shall be less than 20% opacity 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., AC 09-235915]

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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, AO 09-248541]

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.

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Subsection E. This section addresses the following emissions unit.

Facility	E.U. ID	
ID No.	No.	Brief Description
7775047	001	Three relocatable diesel fired generators, with a maximum combined rating of 2460 kW, and
		heat input of 25.74 MMBtu/hr while being fueled by 186.3 gallons of new number 2 fuel oil
		per hour. Emissions are exhausted through a separate 15 ft. stack on each unit.

These relocatable emissions units are Caterpillar Model 3508-DITA 820 kilowatt diesel generators. The generators may be relocated at 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.

{Permitting Notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack. This subsection of this permit is applicable only when the generators are located at the Crystal River Plant. This emissions unit has been established as a separate facility in the Department's data management system, ARMS, but is subject to the conditions of this permit when the generators are located at the Crystal River Plant.}

The following specific conditions apply to the emissions units listed above when located at the Crystal River Plant:

Essential Potential to Emit (PTE) Parameters

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

Unit No.	Heat Input	Fuel Type	
7775047, 001	25.74 MMBtu/hr	Number 2 Fuel	
		Oil	

1 This is total heat input for all three generators combined.

[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 number 2 fuel oil with a maximum sulfur content of 0.5% S by weight shall be fired in the diesel generators. [Rule 62-213.410, F.A.C.]
- **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.]

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Emission Limitations and Standards

E.5. Standard for Visible Emissions. Visible emissions from each generator shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and AC 09-202080.]

Monitoring of Operations

E.6. <u>Fuel Sulfur Analysis</u>. 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 conditions **E.8** and **E.13**. [Rule 62-213.440, F.A.C.]

Test Methods and Procedures

E.7. <u>VE Test Method</u>. 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.** Fuel Sulfur Test Methods. 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. In addition to the requirements of specific condition **I.11** of this permit, testing of emissions shall be conducted with the generators operating at 90 to 100 percent of the maximum fuel firing rate of 186.3 gallons per hour per generator. Failure to submit the actual operating rate with the test report may invalidate the test.

[Rules 62-297.310(2), F.A.C.; and AC 09-202080.]

E.10. <u>Visible Emissions Testing - Annual</u>. Each generator shall be tested on an annual basis, however, annual emissions compliance testing for visible emissions is not required for these emissions units if they burned liquid fuels for less than 400 hours in the previous year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

E.11. Test After Relocation. 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.6, and E.8. [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. Record Daily Hours of Operation. To demonstrate compliance with specific condition **E.4**, records shall indicate the daily hours of operation expressed as "engine-hours" for each of the generators, and the cumulative total 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 AC 09-202080.]

E.13. Record Sulfur Content. 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 asreceived fuel sample analysis. The records shall be maintained for a minimum of five years and made available to the Southwest District Office upon request.

[Rule 62-297.310(8), F.A.C., and AC 09-202080.]

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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, New Source Review review. If Florida Power Corporation requests a relaxation of any of the federally enforceable emission limits of this subsection of 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.** Relocation. Florida Power Corporation 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 Florida Power Corporation 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.

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Subsection F. This section addresses the following emissions unit.

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

Emissions unit 013 is cooling towers for FFSG Units 1, 2 and 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 x 10⁶ 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. <u>Permitted Capacity</u>. The seawater flow rate shall not exceed 735,000 gallons per minute for all cells combined.

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

F.2. 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., AC 09-162037 (PSD-FL-139)]

Emission Limitations and Standards

F.3. 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. PM₁₀ emissions are estimated to be approximately 50% of the particulate matter emission rate.} [Rule 62-213.440, F.A.C., AC 09-162037 (PSD-FL-139)]

[Rule 02-215.440, 1.11.6., 116 07 102057 (15D 1 D-157)]

F.4. <u>Drift Eliminators</u>. 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., 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.5. Emission Test Method. Test using EPA Method 5, from 40 CFR 60 Appendix A, except that a distilled water rinse shall be used in place of acetone, and the impinger catch shall be excluded from the emission calculations. Testing shall be conducted on one cell, selected by the Department, of each of the four towers while the towers are being operated at 90-100% of the seawater flow rate. The seawater flow rate shall be estimated using manufacturers

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certified pump curves or other method approved by the Department. The test report shall include the estimated seawater and air flow rates.

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

Monitoring of Operations

F.6. <u>Test Every Five Years</u>. The owner or operator shall test for particulate emissions every five years, unless actual emissions exceed 80% of allowable, in which case compliance testing is required every 30 months until actual emissions are less than 80% of allowable.

[Rule 62-213.440 and 62-297.310(7), F.A.C., AC 09-162037 (PSD-FL-139), and, AO 09-236827]

Record Keeping and Reporting Requirements

F.7. 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., AC 09-162037 (PSD-FL-139)]

Common Conditions

F.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.

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Subsection G. This section addresses the following emissions unit.

E.U. ID	
No.	Brief Description
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. <u>Permitted Capacity</u>. The maximum seawater flow rate shall not exceed 331,000 gallons per minute per cooling tower.

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

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 PM₁₀.}

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

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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.; 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.; Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88, request of applicant]
- **G.5.** <u>Inspection</u>. The drift eliminators of both towers shall be inspected from the concrete walkways not less than every three months by 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 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 noted below.

[Rule 62-213.440, F.A.C.; 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 as follows:
 - a. Within 30 days after all visual inspections of the drift eliminators.
 - b. Within 45 days after the compliance testing of either tower.

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

E.U. ID	
No.	Brief Description
016	Material handling activities for coal-fired steam units.

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

{Permitting note(s): This emissions unit is regulated partially under Power Plant Siting Certification PA 77-09; 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. <u>Visible Emissions</u>. 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.

[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 PM₁₀) 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. <u>Visible Emissions</u>. (This condition applies to coal facilities associated with emissions units 004 and 003 -- FFSG Units 4 and 5.) <u>Pursuant to 40 CFR 60.254 Test Methods and Procedures.</u>
- (2) EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [40 CFR 60.254]
- H.5. <u>Visible Emissions</u>. (This condition applies to coal facilities associated with emissions units 001 and 002 -- FFSG Units 1 and 2.) <u>VE Test Method</u>. EPA Method 9 shall be used to determine opacity. [Rules 62-4.070(3) and 62-213.440, F.A.C.]

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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.

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		
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,	Three relocatable diesel fired generators, rated at 0.82 MW, 8.58 MMBtu/hr		
001			
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.}

- 1.2. (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.]

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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.** <u>Frequency of Compliance Tests</u>. 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; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - 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) <u>Special Compliance Tests</u>. 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

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quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) <u>Waiver of Compliance Test Requirements</u>. 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.]
- 1.9. 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.]
- **1.10.** 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

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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) <u>Required Flow Rate Range</u>. 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) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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. <u>Malfunctions - Notification.</u> 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:

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- 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.]

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Subsection J. NSPS Common Conditions.

E.U. ID					
No.	Brief Description				
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				
	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 <u>any physical or operational change</u> 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.

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- (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

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40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least <u>five</u> 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).

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- (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

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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.

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(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 O2 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.

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	

{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. <u>Used Oil</u>. 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. <u>Quantity Limited</u>: 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. <u>Used Oil Containing PCBs Not Allowed:</u> 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. <u>PCB Concentration of 2 to less than 50 ppm</u>: 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

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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. <u>Certification Required</u>: 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. <u>Testing Required</u>: 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. <u>Reporting Required</u>: 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]

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Section IV. This section is the Acid Rain Part.

Operated by: Florida Power Corporation/Crystal River Plant

ORIS code: 628

Subsection A. 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 application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

a. DEP Form No. 62-210.900(1)(a), dated July 1, 1995. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_x) requirements for each Acid Rain unit are as follows:

E.U. ID							
No.	EPA ID	Year	2000	2001	2002	2003	2004
001	1	SO2					
		allowances,					
		under Table 2	12320*	12320*	12320*	12320*	12320*
		or 3 of 40					
		CFR Part 73					
		NOx limit	Pursuant to 40 CFR part 76, the Florida Department of Environmental Protection approves a NO _X standard emissions compliance plan for unit 1. The NO _X compliance plan is effective beginning 2000 through calendar year 2003. Under the NO _X compliance plan, this unit's annual average NO _X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(1) of 0.40 lb/MMBtu for tangentially fired boilers. In addition to the described NO _X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO _X compliance plan and the requirements covering				

E.U. ID							
No.	EPA ID	Year	2000	2001	2002	2003	2004
002	2	SO2					
		allowances,					
		under Table 2	14173*	14173*	14173*	14173*	14173*
		or 3 of 40		-			
		CFR Part 73					
004	4	SO2					
		allowances,					
		under Table 2	23452*	23452*	23452*	23452*	23452*
		or 3 of 40					
		CFR Part 73					
003	5	SO2	· —				
		allowances,					
		under Table 2	25040*	25040*	25040*	25040*	25040*
		or 3 of 40					
		CFR Part 73					

^{*} 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.

- **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.
 - 1. No permit revision shall be required for increase 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.
 - 2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- 3. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), 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., Fast-Track Revisions of Acid Rain Parts.

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

A.5. Comments, notes, and justifications: None

Subsection B. This subsection addresses Acid Rain, Phase I.

{Permitting note: The U.S. EPA issues Acid Rain Phase I permit(s)}

The emissions unit listed below is regulated under Acid Rain Part, Phase I, for Florida Power Corporation, Crystal River Plant, Facility ID No.: 0170004, ORIS code: 628.

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

- **B.1.** The owners and operators of these Phase I acid rain unit(s) must comply with the standard requirements and special provisions set forth in the permit(s) listed below:
- a. Phase I permit dated 03/27/97. [Chapter 62-213, F.A.C.]
- **B.2.** Nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	NOx limit*
-002	2	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO _X early election compliance plan for unit 2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO _X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(1) of 0.45 lb/MMBtu" for tangentially fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(1) of 0.40 lb/MMBtu" for tangentially fired boilers until calendar year 2008. In addition to the described NO _X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO _X compliance plan and the requirements covering excess emissions.

PROPOSED Permit No.: 0170004-004-AV

-004	4	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO _X early election compliance plan for unit 4. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO _X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO _X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO _X compliance plan and the requirements of an order to experience average emissions.
		compliance plan and the requirements covering excess emissions.
-003	. 5	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO_X early election compliance plan for unit 5. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X
		compliance plan and the requirements covering excess emissions.

^{*} Based on the Phase II NO_X Compliance Plan dated December 19, 1997.

B.3. Comments, notes, and justifications: none

Table 1-1, Summary of Air Pollutant Emission Standards

Florida Power Corporation Crystal River Plant PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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

			Allowable Emissions	Equivalent Emissions ¹					
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
VE (Unit 1)	Coal No. 2 fuel oil as ignitor ^a	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 ^a	8760	20% opacity (except for one two-minute period per hour, opacity ≤ 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 ^a	8760	60% opacity during 3-hours in any 24 hour period of excess emissions					Rule 62- 210.700(3), F.A.C.	A.5.

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

			Allowable Emissions			Equivalent Emissions ¹			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
PM	Coal No. 2 fuel oil as ignitor ^a	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	Coal No. 2 fuel oil as ignitor ^a	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 ₂	Coal No. 2 fuel oil as ignitor ^a	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)	Rules 62- 213.440, F.A.C. and PPSC PA 77-09	A.8.

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.

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

			Allowable Emissions		Equivalent Emissions 1, b				
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
PM	Coal ^a	8760	0.10 lb/mmBtu			666.5	2919.3	40 CFR 60.42(a)(1) & (2)	B.4.
VE	Coal ^a	8760	20% opacity (except for one six-minute period per hour of 27% opacity)				7 - 20 to 1	40 CFR 60.42(a)(1) & (2)	B.4.
SO ₂	Coal ^a	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.
NOx	Coal ^a	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.

- No.2 FO - subscribing - No.2 FO - subscribing - Coal

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.

			Allowable Emissions			Equivalent Emissions		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPŸ	Regulatory Citations	See Permit Condition(s)
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.

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 ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
VE		8760	20% opacity			100000	Rule 62-	D.2.
							296.320(4)(b)1,	
							F.A.C.	

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
7775047, 001	Three Relocatable Diesel Fired Generators.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory Citations	See Permit Condition(s)
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 ₂	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 7775047, 001:

Equivalent emissions are for all three diesel generators combined.

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.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
PM		4320		11.9,	- <u></u>	428, all 925, all	Rule 62-	F.3.
				each cell		cells cells	213.440,	
						*	F.A.C., AC 09-	
							162037 (PSD-	
						A CONTRACTOR OF THE CONTRACTOR	FL-139)]	

Emissions Unit	Brief Description
015	Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
PM		8760		175,		766.5,	Rule 62-	G.2.
				each		each	213.440,	
				tower		tower	F.A.C.; Modified	
						**************************************	PSD permit,	
						The second second	PSD-FL-007	

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.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
VE		8760	20% opacity				40 CFR 60.252	H.1 & H.2
							(Units 4 and 5)	
							and PPSC PA77-	
							09 (Units 1, 2, 4	
							and 5)]_	
PM		8760	Practices described in the				AC 09-162037,	H.3
			Best Management Plan				PSD-FL-139	
							specific	
							condition 3	

Notes for all tables:

¹ The "Equivalent Emissions" listed are for informational purposes only. NA = not applicable

Table 2-1, Summary of Compliance Requirements

Florida Power Corporation Crystal River Plant PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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

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.

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)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or		Method	Frequency	Base Date ¹	Compliance Test		Condition(s)
Parameter					Duration		
VE	Coal ^a	EPA Method 9	Annual	June 1st	1 hour	Yes	B.8, B.12
PM	Coal ^a	EPA Methods 5 and 17	Annual	June 1st	3 hours		B.8, B.12
SO ₂	Coal ^a	EPA Methods 6. 6A, 6C	Annual	June 1st	3 hours	Yes	B.8, B.12
NOx	Coal ^a	EPA Methods 7, 7A, 7C, 7D, 7E	Annual	June 1st	3 hours	Yes	B.8, B.12

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.

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

Emissions Unit	Brief Description
7775047, 001	Three Relocatable Diesel Fired Generators

Pollutant	Fuel(s)	Compliance Method	Testing	Frequency Base Date ¹	Minimum Compliance Test	CMS ²	See Permit Condition(s)
or Parameter		ivietriou	Frequency	Dase Date	Duration		Condition(s)
SO ₂	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 ₂	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

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)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or		Method	Frequency	Base Date ¹	Compliance Test		Condition(s)
Parameter					Duration		
PM	NA	EPA Method 5	See note (a) of	See note (a)	3 hours	No	F.5.
			this table	of this table			

Note for Emissions Unit 013:

(a) Testing frequency is by June 30, 1998 and every five years thereafter, unless actual emissions exceed 80% of allowable, in which case compliance testing is required every 30 months until actual emissions are less than 80% of allowable.

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	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or		Method	Frequency	Base Date	Compliance Test		Condition(s)
Parameter					Duration		
PM	NA	Sensitive paper method	See note (a) of	See note (a)		No	G.3.
			this table	of this table			
Inspection	NA	By Florida Power Corporation staff or	not less than				G.5.
of the drift		representatives	every three				
eliminators			months				
Inspection	NA	By a manufacturer of drift eliminators	Not less than				G.5.
of the		or by a consultant with recognized	annually				
towers		expertise in the field					

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.

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.

No regular testing of Emissions Unit 016 is required.

Notes for all tables:

NA = not applicable

 $^{^{1}}$ Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. 2 CMS = continuous monitoring system

Table 1-1, Summary of Air Pollutant Emission Standards

Florida Power Corporation Crystal River Plant PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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				

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory Citations	See Permit Condition(s)
VE (Unit 1)	Coal No. 2 fuel oil as ignitor ^a	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 ^a	8760	20% opacity (except for one two-minute period per hour, opacity ≤ 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 ^a	8760	60% opacity during 3-hours in any 24 hour period of excess emissions				Rule 62- 210.700(3), F.A.C.	A.5.

ZtVa

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

_			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
PM	Coal No. 2 fuel oil as ignitor ^a	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	Coal No. 2 fuel oil as ignitor ^a	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 ₂	Coal No. 2 fuel oil as ignitor ^a	8760	2.1 lb/mmBtu heat input			7875 (Unit 1) 10,069. 5 (Unit 2)	(Unit 1)	Rules 62- 213.440, F.A.C. and PPSC PA 77-09	A.8.

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.

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					

			Allowable Emissions			Equivalent Emissions ¹			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory Citations	See Permit Condition(s)
PM	Coal ^a	8760	0.10 lb/mmBtu			666.5	2919.3	40 CFR 60.42(a)(1) & (2)	B.4.
VE	Coal ^a	8760	20% opacity (except for one six-minute period per hour of 27% opacity)					40 CFR 60.42(a)(1) & (2)	B.4.
SO ₂	Coal ^a	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.
NOx	Coal ^a	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.

Table 1-1, Continued

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.

			Allowable Emissions	_		Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory Citations	See Permit Condition(s)
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.

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 ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
VE		8760	20% opacity				Rule 62-	D.2.
						2.22	296.320(4)(b)1,	
						enter allegation	F.A.C.	

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
7775047, 001	Three Relocatable Diesel Fired Generators.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory Citations	See Permit Condition(s)
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 ₂	Number 2 fuel oil, max. 0.5 wt. % S	2970	Maximum 0.5% S by weight			13.2	Rule 62- 213.410, F.A.C.	E.3

Note for emissions unit 7775047, 001:

Equivalent emissions are for all three diesel generators combined.

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

			Allowable Emissions	•		Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory Citations	See Permit Condition(s)
PM		4320		11.9, each cell		428, all 925, all cells	Rule 62- 213.440, F.A.C., AC 09- 162037 (PSD- FL-139)]	F.3.

Emissions Unit	Brief Description
015	Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature.

			Allowable Emissions			Equivalent Emissions ¹		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour TPY	Regulatory	See Permit
		per Year					Citations	Condition(s)
PM		8760	-	175,		766.5,	Rule 62-	G.2.
				each		each	213.440,	
				tower		tower	F.A.C.; Modified	
							PSD permit,	
						20 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PSD-FL-007	

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.

			Allowable Emissions			Equivalent Emissions ¹	66 , 31, 70, 70, 70, 70, 70, 70, 70, 70, 70, 70		
Pollutant	Fuel(s)	Hours	Standard(s)	lb./hour	TPY	lb./hour	TPY	Regulatory	See Permit
		per Year						Citations	Condition(s)
VE		8760	20% opacity					40 CFR 60.252	H.1 & H.2
								(Units 4 and 5)	
								and PPSC PA77-	
								09 (Units 1, 2, 4	
								and 5)]	
PM		8760	Practices described in the					AC 09-162037,	H.3
			Best Management Plan					PSD-FL-139	
								specific	
								condition 3	

Notes for all tables:

¹ The "Equivalent Emissions" listed are for informational purposes only. NA = not applicable

Table 2-1, Summary of Compliance Requirements

Florida Power Corporation Crystal River Plant PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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

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.

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)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or		Method	Frequency	Base Date ¹	Compliance Test		Condition(s)
Parameter					Duration		
VE	Coal ^a	EPA Method 9	Annual	June 1st	1 hour	Yes	B.8, B.12
PM	Coal ^a	EPA Methods 5 and 17	Annual	June 1st	3 hours		B.8, B.12
SO ₂	Coal ^a	EPA Methods 6. 6A, 6C	Annual	June 1st	3 hours	Yes	B.8, B.12
NOx	Coal ^a	EPA Methods 7, 7A, 7C, 7D, 7E	Annual	June 1st	3 hours	Yes	B.8, B.12

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.

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

Emissions Unit	Brief Description
7775047, 001	Three Relocatable Diesel Fired Generators

Pollutant	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS ²	See Permit
or Parameter		Method	Frequency	Base Date ¹	Compliance Test Duration		Condition(s)
	Number	Fuel Sulfur Analysis, ASTM D2622-94,	Linon cook		Duration		E.6, E.8
SO ₂	2 Fuel Oil	ASTM D4294-90, both ASTM D4057- 88 and ASTM D129-95, or the latest edition(s)	Upon each fuel delivery				E.0, 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 ₂	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

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	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date ¹	Minimum Compliance Test	CMS ²	See Permit Condition(s)
Parameter					Duration		
PM	NA	EPA Method 5	See note (a) of this table	See note (a) of this table	3 hours	No	F.5.

Note for Emissions Unit 013:

(a) Testing frequency is by June 30, 1998 and every five years thereafter, unless actual emissions exceed 80% of allowable, in which case compliance testing is required every 30 months until actual emissions are less than 80% of allowable.

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 ¹	Minimum Compliance Test Duration	CMS ²	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.

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.

No regular testing of Emissions Unit 016 is required.

Notes for all tables:

NA = not applicable

¹ Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. ² CMS = continuous monitoring system

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

Florida Power Corporation Crystal River Plant PROPOSED Permit No.: 0170004-004-AV Facility ID No.: 0170004

<u>Unregulated Emissions Units and/or Activities</u>. 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.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

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

Notes:

1 This unregulated emissions unit consists of the following facilities:

Associated with FFSG 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.

Rotoclone with air filter at Unit 1.

Oil vent at Unit 1.

Associated with Nuclear 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 FFSG 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.

2 This unregulated emissions unit consists of the following facilities:

Associated with FFSG Units 4 and 5:

Water treatment systems for FFSG Units 4 and 5.

Associated with the Crystal River Site:

Sewage treatment plant.

Lime storage.

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

Florida Power Corporation Crystal River Plant

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.

PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004

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 refueling and storage tanks.
- 2. Diesel fire pump and tank at FFSG Unit 1.
- 3. 260 kW emergency diesel generator at Nuclear Unit 3 technical support center.
- 4. Nuclear Unit 3 diesel generator air compressor.
- 5. Nuclear Unit 3 halon fire protection system.
- 6. Two fire protection tanks at Nuclear Unit 3.
- 7. Fire pump house emergency diesel generator units and electric generator units.
- 8. Laboratory facilities.
- 9. CEM equipment and calibration gas storage and venting.
- 10. Surface coating of less than 6.0 gallons per day.
- 11. Brazing, soldering and welding.
- 12. Grounds maintenance.

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PROPOSED Permit No.: 0170004-004-AV

Facility ID No.: 0170004

Appendix H-1, Permit History/ID Number Changes

Permit History (for tracking purposes):

E.U.			Issue	Expiration	Extended	Revised
ID No.	Description	Permit No.	Date	Date	Date ^{1, 2}	Date(s)
001	Unit 1	AO 09-169341	12/20/89	12/18/94		2/11/94
				·		2/6/97
002	Unit 2	AO 09-191820	5/21/91	5/21/96		6/24/91
		•				2/11/94
						2/6/97
001 &	Units 1 and 2	0170004-002-AO	9/16/96			
002	Used Oil Firing	(Mod. of above				
		permits)				
004,	Units 4 & 5, & Cooling	PSD Permit	3/30/78			11/30/88
003,	Towers for 4 & 5	PSD-FL-007	2/27/80		•	
015						2122122
004,	Power Plant Siting	PA 77-09	11/21/78			2/22/80
003	Certification, Units 4 &5	ρ				5/22/80 5/6/82
	(Incl. Limits on Sulfur					2/2/84
	for Units 1 & 2)					7/3/84
						9/12/97
006,	Units 1 & 2 Flyash	AC 09-184438	11/9/90	10/31/91		0,12,07
008,	Handling System	AC 09-256791	11/17/94	01/15/96		
009,	(Sources 1, 4 &5)	(Replaced AC 09-				
010	(100,000,000,000,000,000,000,000,000,000	184438)				
008	Units 1 & 2 Flyash	AO 09-193593	3/26/91	10/31/91		
	Transfer Silo (Source 3)					
006,	Units 1 & 2 Flyash	AO 09-202440	11/8/91	10/31/96		
008,	Handling System					
009,	(Sources 1, 3, 4 & 5)					
010						

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

Permit History, Continued:

E.U.			Issue	Expiration	Extended	Revised
ID No.	Description	Permit No.	Date	Date	Date ^{1, 2}	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		
7775047 , 001	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		

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., effective 03/20/96, allows Title V Sources to operate under existing valid permits}