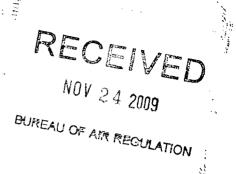


November 11, 2009

Mr. Jon Holtom, P.E.
DEP/DARM
TV Program
Division of Air Resource Management
2600 Blair Stone Road MS 5505
Tallahassee, Florida 32399-2400



Re:

Crystal River Power Plant – Permit Number 0170004-024-AV – Comments on the draft/proposed Title V permit

Dear Mr. Holtom:

Thank you very much for the Crystal River draft/proposed permit that we received on October 30, 2009. Progress Energy proposes to modify the permit language as indicated in the attached document. We have used the track change system to show the changes. Where we use the word "comment" or "note" – these are comments and notes to you and not intended to remain in the permit.

If you have any questions, please contact me at (727) 820-5295. Thank you very much for your help with the permit renewal process.

Best Regards,

Larry Hatcher

Plant Manager Crystal River Fossil Plant & Fuel Operations

XC: Dave Meyer

Attachment

Bxc: Cyndy Wilkinson – Plant file point: 12512-C-01

Brandon Barr - PA3A

Dave Meyer – PEF903 (EHSS files)

Kim McDaniel – PEF903

Xc: Scott Osbourn, P.E.

Golder Associates

5100 West Lemon Street, Suite 114

Tampa, FL 33609

CERTIFIED MAIL ARTICLE NO.: 7009 0080 0001 6934 4065

Hi Jonathan,

As we discussed by phone, we would like to add an engine to Appendix ICE - Requirements For Internal Combustion Engines:

E.U. No.	Brief description of engine	In-service date	<u>Displacement</u>	Rule Applicability
<u>031?</u>	Crystal River Unit 3 trailer mounted fire pump	02/2008	8700 CC	ZZZZ, IIII

Formatted: Left

Florida Power Corporation dba Progress Energy Florida, Inc. Crystal River Power Plant

Facility ID No. 0170004 Citrus County

Title V Air Operation Permit Renewal

Permit No. 0170004-024-AV (Renewal of Title V Air Operation Permit No. 0170004-009-AV)



Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section

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

Telephone: (850) 488-0114 Fax: (850) 921-9533

Compliance Authority:

State of Florida
Department of Environmental Protection
Southwest District Office

13051 North Telecom Parkway Temple Terrace, FL 33637-0926

Telephone: 813/632-7600 Fax: 813/632-7668

<u>Title V Air Operation Permit Renewal</u> Permit No. 0170004-024-AV

Table of Contents

Sec	ection Pr	age Number
ı	Facility Information.	
1.	A. Facility Description.	2
	B. Summary of Emissions Units.	
	C. Applicable Regulations.	
	C. Applicable Regulations.	2
II.	Facility-wide Conditions.	4
Ш.	Emissions Units and Conditions.	
	A. Fossil Fuel Steam Generator (FFSG), Units 1 and 2	6
	B. FFSG Units 4 and 5.	12
	C. Fly Ash Transfer & Storage, Units 1 and 2	18
	D. Bottom Ash Storage Silo for Units 1 and 2.	21
	E. Relocatable Diesel Generators	
	F. Cooling Towers for Units 1, 2, and 3.	
	G. Cooling Towers for Units 4 and 5	
	H. Material Handling Activities for Coal-Fired Steam Units	
	I. Portable Cooling Towers for Units 1 and 2	33
	J. Used Oil Common Condition	
IV.	'. Acid Rain Part	37
	Phase II Acid Rain Application/Compliance Plan.	
	Phase II Acid Rain NO _X Compliance Plan.	
	Phase II Acid Rain NO _X Averaging Plan.	
V.	Clean Air Interstate Rule Part	49
VI.	f. Appendices	55
	Appendix A, Glossary.	
	Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 9, 1997).	
	Appendix CAM, Compliance Assurance Monitoring Plan.	
	Appendix I, List of Insignificant Emissions Units and/or Activities.	
	Appendix NSPS, Subpart A – General Provisions.	
	Appendix NSPS, Subpart D - Standards of Performance for Fossil Fuel Fired Steam Generators for	or which
	Construction is Commenced After August 17, 1971.	
	Appendix NSPS, Subpart IIII, Standards of Performance for Stationary Compression Ignition Inte	rnal
	Combustion Engines.	
	Appendix NSPS, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Co	ombustion
	Engines.	
	Appendix NSPS, Subpart Y – Standards of Performance for Coal Preparation Plants.	
	Appendix NESHAP, Subpart A – General Provisions.	
	Appendix NESHAP, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants i	ior
	Stationary Reciprocating Internal Combustion Engines.	V.
	Appendix RR, Facility-wide Reporting Requirements.	
	Appendix TR, Facility-wide Testing Requirements.	
	Appendix TV, Title V General Conditions.	
	Appendix 1 V, Title V General Conditions. Appendix U, List of Unregulated Emissions Units and/or Activities.	
	Appendix O, List of Officgulated Emissions Offics and/of Activities.	

Progress Energy Florida, Inc.	Crystal River Power Plant	
Referenced Attachments	At End	
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and		
Monitoring System Performance (40 CFR 60, July, 1996).		
Table H, Permit History.		

DRAFT/PROPOSED PERMIT

PERMITTEE:

Florida Power Corporation dba Progress Energy Florida, Inc. 299 First Avenue North Mail Code CN77 St. Petersburg, Florida 33701 Permit No. 0170004-024-AV Crystal River Power Plant Facility ID No. 0170004 Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Crystal River Power Plant is located in Citrus County at 15760 West Power Line, Crystal River, Florida. UTM Coordinates are: Zone 17, 334.3 km East and 3204.5 km North. Latitude is: 28° 57' 34" North and Longitude is: 82° 42' 1" West.

The 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 operate the facility in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2010

Renewal Application Due Date: May 20, 2014

Expiration Date: December 31, 2014

(Draft/Proposed)

Joseph Kahn, Director Division of Air Resource Management

JK/tlv/jkh/sm

Subsection A. Facility Description.

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

Subsection B. Summary of Emissions Units.

E.U. No.	Brief Description		
Regulatea	Emission Units		
001	FFSG, Unit 1		
002	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		
012	Relocatable diesel generators		
013	Cooling towers for FFSG Units 1, 2, and 3		
015	Cooling towers for FFSG Units 4 and 5		
016	Material handling activities for coal-fired steam units		
020	Portable Cooling Towers for FFSG Units 1 and 2		
028	3500 kW diesel generator associated with Unit 3		
029	Diesel fire pump, south yard		
030	Emergency generator (meteorological weather station)		
Unregulated	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		

Subsection C. Applicable Regulations.

Based on the Title V air operation renewal application received May 21, 2009, this facility is a major source of hazardous air pollutants (HAP). Because this facility operates stationary reciprocating internal combustion engines (EU019), it is subject to regulation under 40 CFR 63, Subpart ZZZZ - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. However, since the engines being operated meet the Subpart ZZZZ definition of "existing units", there are no unit specific applicable requirements that must be met pursuant to this rule at this time. The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU Nos.
40 CFR 60, Subpart A, NSPS General Provisions	003, 004, 016
40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction	003, 004

SECTION I. FACILITY INFORMATION.

is Commenced After August 17, 1971	1
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	EU029
40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	EU030
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	EU028, EU029, EU030
40 CFR 63, Subpart Y, Standards of Performance for Coal Preparation Plants.	016
40 CFR 75 Acid Rain Monitoring Provisions	001, 002, 003, 004
62-296.405, F.A.C.	001, 002
62-210.370, F.A.C.	001, 002, 003, 004, 006, 008, 009, 010, 013, 014, 015, 016, 020
62-210.700, F.A.C.	001, 002, 003, 004, 006, 008, 009, 010, 013, 014, 015, 016, 020
62-213.410, F.A.C.	001, 002, 003, 004, 006, 008, 009, 010, 013, 014, 015, 016, 020
62-213.440, F.A.C.	001, 002, 003, 004, 006, 008, 009, 010, 013, 014, 015, 016, 020
62-297.310, F.A.C.	001, 002, 003, 004, 006, 008, 009, 010, 013, 014, 015, 016, 020

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section VI, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

- FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- FW3. General 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 or organic solvents 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), F.A.C.; Permit No. 0170004-024-AC]

- **FW4.** General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including 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 emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - 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), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 21, 2009.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

- **FW6.** Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]
- FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tyfee.htm. [Rule 62-213.205, F.A.C.]

- FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]
- FW9. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
 - b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
 - c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.
 - d. Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to: Department of Community Affairs, Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9921, Fax: (850) 488-1739.
 - e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.

Send the required annual registration fee using approved forms made payable to: Cashier, Department of Community Affairs, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149

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

Subsection A. Emissions Units 001, 002

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
001	FFSG, Unit 1
002	FFSG, Unit 2

Emissions unit 001 (EU001) is a pulverized coal dry bottom boiler, tangentially-fired It is rated at 440.5 MW. Emissions are exhausted through a 499 feet stack with a 15 feet exit diameter, 291 °F exit temperature and 1,407,923 acfm actual volumetric flow rate.

Emissions unit 002 (EU001) is a pulverized coal, dry bottom boiler, tangentially-fired It is rated at 523.8 MW. Emissions are exhausted through a 502 feet stack with a 16 feet exit diameter, 300 °F exit temperature and 1,931,324 acfm actual volumetric flow rate.

Emissions from both EU001 and EU002 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. The pollutants' emissions limits in Rule 62-296.405, F.A.C. have been changed through Permit Nos. 0170004-003-AC, 0170004-006-AC, PSD-FL-007, and PA 77-09. Fossil fuel fired steam generator Unit 1 began commercial operation in 1966. Fossil fuel fired steam generator Unit 2 began commercial operation in 1969.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

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

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 & 62-296.405, F.A.C.; and, Permit Nos. 0170004-003-AC and 0170004-006-AC]

Heat input shall be determined by coal analysis and the coal feeder scales. 24 hour average. The CEMs heat input value shall not be used.

Formatted: Indent: Left: 0.25"

A.2. Methods of Operation.

- a. Fuels. The fuels that are allowed to be burned in these units are:
 - (1) Bituminous coal,
 - (2) Bituminous coal and bituminous coal briquette mixture,
 - (3) Distillate fuel oil for startup.
 - (4) Used oil in accordance with the specific conditions in Subsection J.,
 - (5) Oily flyash in accordance with Specific Condition A.3.

[Rule 62-213.410, F.A.C.; Permit Nos. 0170004-002-AO; 0170004-005-AO; and, 0170004-006-AC]

- A.3. <u>Oily Flyash.</u> These emissions units may burn oily flyash ("flyash") from Bartow Unit 1 in accordance with the following:
- a. Limited Flyash. 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.

Formatted: Indent: Left: 0", Tab stops: 0.5", Left

Subsection A. Emissions Units 001, 002

- Blend Rate Limit. The maximum flyash blend rate shall not exceed 2% of the total boiler feed on a weight basis.
- c. Recordkeeping. The owner or operator shall make and maintain the following records for each day that flyash is humed in the holler:
- (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).

[Rule 62-213.440, F.A.C.; and, Permit No. 0170004-005-AO]

Comment: Bartow unit 1 has been taken out of service

- A.4. <u>Hours of Operation</u>. The emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]
- A.5. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions A.6.-A.10. are based on the specified averaging time of the applicable test method.

- A.6. Visible Emissions (VE).
 - a. EU001. The VE from FFSG Unit 1 shall not exceed 40 percent opacity, six minute average. [Rule 62-296.405(1)(a), F.A.C.; OGC Case No. 86-1576, Order dated December 11, 1986; Permit No. 0170004-003-AC]
 - b. EU002. The VE from FFSG Unit 2 shall not exceed 20 percent opacity, six minute average, except for one two-minute period per hour during which opacity shall not exceed 40 percent. [Rule 62-296.405(1)(a), F.A.C.; Permit No. 0170004-003-AC]

{Permitting Note: Quarterly PM testing not required per Rule 62-296.405(1)(a), F.A.C. per OGC Case No. 86-1576}

- A.7. <u>VE Soot Blowing and Load Change</u>. Excess emissions resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3-hours in any 24 hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), six minute average, and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of the excess emissions shall be minimized.
 - a. Load Change. 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.
 - b. VE > 60%. VE 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.; Permit No. 0170004-003-AC]

{Permitting Note: These units have operational continuous opacity monitors.}

A.8. Particulate Matter (PM) Emissions. PM emissions shall not exceed 0.1 pound per million Btu heat input. [Rule 62-296.405(1)(b), F.A.C.; Permit No. 0170004-003-AC]

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

Formatted: Indent: Hanging: 0.25", Space After: 0 pt, Tab stops: 0.5", Left + Not at

Subsection A. Emissions Units 001, 002

- A.9. PM Soot Blowing and Load Change. PM emissions shall not exceed an average of 0.3 pounds 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.; Permit No. 0170004-003-AC]
- A.10. Sulfur Dioxide (SO₂).
 - a. Coal Burning. When burning coal, SO₂ emissions shall not exceed 2.1 pounds per million Btu heat input, 24-hour average.
 - b. Coal/Briquette Mixture. The maximum percent sulfur content of the coal/briquette mixture shipment shall not exceed 1.05%, by weight, averaged on an annual basis.

[Rule 62-213.440, F.A.C.; PPSC PA 77-09; Permit Nos. PSD-FL-007, 0170004-003-AC; and, 0170004-006-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- A.11. Excess Emissions Allowed
 - a. 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.]
 - b. 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.]

A.12. Excess Emissions Prohibited. 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

A.13. CAM Plan. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Continuous Monitoring Requirements

A.14. Continuous Monitoring System. Each owner or operator shall install, calibrate, operate and maintain a continuous monitoring system for continuously monitoring opacity. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 C.F.R. Part 51, Appendix P, adopted and incorporated by reference in subsection 62-204.800(2), F.A.C., and 40 C.F.R. Part 60, Appendix B, adopted by reference in subsection 62-204.800(7), F.A.C. [Rule 62-296.405(f), F.A.C.]

{Permitting Note: The Acid Rain CEMs, required by 40 CFR 75, satisfies Specific Condition A.14.}

Test Methods and Procedures

A.15. Test Methods. Required tests shall be performed in accordance with the following reference methods:

	Method	Description of Method and Comments
ı	3	Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight

Formatted: No underline

Subsection A. Emissions Units 001, 002

Method	Description of Method and Comments	
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources	
5	Determination of Particulate Emissions from Stationary Sources	
5B	Determination of Nonsulfuric Acid Particulate Matter from Stationary Sources	
5F	Determination of Nonsulfate Particulate Matter from Stationary Sources	
6	Determination of Sulfur Dioxide Emissions from Stationary Sources	
6A	Determination of Sulfur Dioxide Daily Average Emissions from Fossil Fuel Combustion Sources	
6B	Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources	
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources	
9	Visual Determination of the Opacity of Emissions from Stationary Sources	
17	Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method)	
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)	
ASTM D2013-72, ASTM D3177-75, ASTM D4239-85, or latest ASTM edition methods Standard Methods by the American Society of Testing and Materials for Analysis		

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.401, and 62-204.800, F.A.C., Permit No. 0170004-003-AC]

- **A.16.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.17. Annual Compliance Tests Required. Except as provided in Specific Condition A.24., during each federal fiscal year (October 1st to September 30th), each EU001 and EU002 shall be tested to demonstrate compliance with the emissions standards for PM and VE. [Rule 62-297.310(7), F.A.C.; OGC Case No.: 86-1576; and Permit No. 0170004-003-AC]
- A.18. Compliance Tests Prior To Renewal. Except as provided in Specific Condition A.24., compliance tests shall be performed for PM and VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions A.6. A.10. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Subsection A. Emissions Units 001, 002

- A.19. PM Emissions. The test methods for PM emissions shall be EPA Methods 17, 5, 5B, or 5F, 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.; Permit No. 0170004-003-AC]
- A.20. <u>VE</u>. The test method for VE shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. In lieu of Method 9 testing, a transmissometer utilizing a 6-minute block average for opacity measurement may be used, provided such transmissometer is installed, certified, calibrated, operated and maintained in accordance with the provisions of 40 CFR 75. [Rules 62-296.405(1)(e)1. and 62-297.401, F.A.C.; Permit No. 0170004-003-AC]
- A.21. SO₂. The test methods for SO₂ 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. 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.; Permit No. 0170004-003-AC; PA 77-09]
- A.22. SO₂ Fuel Analysis. The owner or operator may demonstrate compliance with the SO₂ 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.21. and A.23. [Rule 62-296.405(1)(f)1.b., F.A.C.; Permit Nos. 0170004-003-AC and 0170004-006-AC]
- A.23. SO₂ Alternate 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 SO₂ standard:
 - a. *Method*. 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. Recordkeeping. Record daily the amount of coal fired, the density (<u>fuel oil</u>) of each fuel, the Btu value, and the percent sulfur content by weight of each fuel.
 - c. Calculations. 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.; Permit Nos. 0170004-003-AC and 0170004-006-AC]

- **A.24.** 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.]

Recordkeeping and Reporting Requirements

Subsection A. Emissions Units 001, 002

A.25. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emissions	Quarterly	A.26.

- A.26. Quarterly Reporting. The owners or operators shall submit to the Department a written report of emissions in excess of the emission limiting standards, for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the facility for a period of two years. [Rule 62-296.405(g), F.A.C.]
- **A.27.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

A.28. These emissions units are also subject to conditions contained in Subsection J. Used Oil Common Condition.

Subsection B. Emissions Units 003, 004

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
003	FFSG, Unit 5
004	FFSG, Unit 4

Emissions units 003 and 004 (EU003 and EU004) are pulverized coal, dry bottom boilers, wall-fired. Both are rated at 760 MW. Emissions are exhausted through their own stacks. Each stack is 600 feet stack with a 25.5 feet exit diameter, 253 °F exit temperature and 2,979 acfm actual volumetric flow rate. 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; PSD-FL-007 issued by EPA in February 1978 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.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
004	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal
004	0003	Briquette Mixture
002	(((5	Bituminous Coal and Bituminous Coal /Bituminous Coal
1 003	8 Briquette Mixture	

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330, F.A.C.]

- B.2. Methods of Operation.
 - a. Fuels. The fuels that are allowed to be burned in these units are:
 - (1) Bitumnous coal,
 - (2) Bitumnous coal and bituminous coal briquestte mixture with the exception that No. 2 Fuel oil may be used as an ignitor fuel and low load flame stabilization fuel . nNatural gas may be used as a startup and low load flame stabilization fuel.
 - (3) Used oil in accordance with the specific conditions of this permit (See Subsection J.). [Rule 62-213.410, F.A.C.; Permit No. 0170004-006-AC; PPSC PA-77-09 and modified conditions]
- B.3. <u>Flue Gas Desulfurization (FGD) Equipment.</u> 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]
- **B.4.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- **B.5.** 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

Unless otherwise specified, the averaging times for Specific Conditions B.6. - B.10. are based on the specified averaging time of the applicable test method.

B.6. <u>PM Emissions.</u> No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:

Subsection B. Emissions Units 003, 004

- a. Contain PM in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.
- b. Exhibit greater than 20 percent opacity, six minute average, except for one six-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42(a)(1) & (2)]

- **B.7.** SO₂ Emissions. No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain SO₂ in excess of:
 - a. 340 nanograms per joule heat input (0.80 lb per million Btu), 24-hour average, derived from liquid fossil fuel.
 - 520 nanograms per joule heat input (1.2 lb per million Btu), 24-hour average, derived from solid fossil fuel.
 - c. 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.
- d. 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.8**. $SO_2 Sulfur Content$.
 - a. The maximum percent sulfur content of the coal/briquette mixture shall not exceed 0.68%, by weight, averaged on an annual basis. [Rule 62-213.440, F.A.C.; and, Permit No. 0170004-006-AC]
 - b. Fuel oil shall not contain more than 0.73% sulfur by weight. (See Specific Condition B.2.) [Rule 62-213.410, F.A.C.; PPSC PA-77-09 and modified conditions]
- B.9. <u>Nitrogen Oxides (NO_x) Emissions</u>. No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:
 - a. 86 nanograms per joule heat input (0.20 lb per million Btu), 30-day rolling average, derived from gaseous fossil fuel.
 - b. 129 nanograms per joule heat input (0.30 lb per million Btu), 30-day rolling average, derived from liquid fossil fuel.
 - c. 300 nanograms per joule heat input (0.70 lb per million Btu), 30-day rolling average, derived from solid fossil fuel.
 - d. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

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

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]

Subsection B. Emissions Units 003, 004

B.10. Unit Specific State Only Limit For NO_X. A unit specific, state-only average annual NO_X emission limit of 0.50 lb/mmBtu applies. Compliance shall be demonstrated within the Annual Operating Report (AOR). [Rule 62-4.070(3), F.A..C.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

B.11. Excess Emissions Allowed. 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.]

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.

[40 CFR 60.11]

- **B.12.** Excess Emissions Prohibited. 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.]
- B.13. NSPS Excess Emissions. Excess emissions shall be as defined in 40 CFR 60.45(g), Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971. [40 CFR 60.45(g)]

Monitoring of Operations

- **B.14.** CAM Plan. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]
- B.15. Ambient Air Monitoring. Ambient monitoring station No. 4 includes one continuous ambient sulfur dioxide (SO²) monitor. A second ambient monitoring station located on site (Site No. 2) includes monitors for particulate matter less than 10 micrometers in diameter (PM₁₀) particulate matter 2.5 micrometers in diameter and smaller (PM_{2.5}), and SO₂. All monitors located at Site No. 2 will continue to be operated by Progress Energy Florida (PEF) and PEF will continue reporting data from these monitors as required by Special Condition 1.A.2 of the Conditions of Certification. Based on the Post-certification Amendment, dated June 19, 2008, the Department determined that PEF could cease to operate and remove the Site No. 4 monitoring station (SO₂ only). 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.; Department letter dated July 23, 2008]

Continuous Monitoring Requirements

- B.16. Required Continuous Monitoring Systems (CMS). Continuous monitoring systems are required for SO₂, NO_X, CO₂ and opacity. CMS shall be in accordance with the requirements of 40 CFR 60.45. [40 CFR 60.45; and PPSC PA 77-09]
- B.17. <u>COMS for Periodic Monitoring</u>: Periodic monitoring for opacity shall be COMS, which are maintained and operated in conformance with 40 CFR Part 75. [Rule 62-213.440, F.A.C.]

Test Methods and Procedures

Progress Energy Florida, Inc. Crystal River Power Plant Formatted: Indent: Left: 0.25

Formatted: Indent: Left: 0.25"

Subsection B. Emissions Units 003, 004

B.18. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources
3B	Gas Analysis for The Determination of Emission Rate Correction Factor or Excess Air
5	Determination of Particulate Emissions from Stationary Sources
5B	Determination of Sulfur Dioxide Emissions from Stationary Sources
6	Determination of Sulfur Dioxide Daily Average Emissions from Fossil Fuel Combustion Sources
6A	Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources
6B	Determination of Sulfur Dioxide Emissions from Stationary Sources
6C	Determination of Nitrogen Oxide Emissions from Stationary Sources
7	Determination of Nitrogen Oxide Emissions from Stationary Sources – Ion Chromatographic Method
7A	Determination of Nitrogen Oxide Emissions from Stationary Sources – Alkaline-Permanganate/Colormetric Method
7C	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrument Analyzer Procedure)
7D	Gas Analysis for The Determination of Emission Rate Correction Factor or Excess Air
7 E	Determination of Nitrogen Oxide Emissions from Stationary Sources
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emission from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
ASTM Method D2015- 77, D240-76, D1826-77, ASTM D2013-72, ASTM D3177-75, and ASTM D4239-85, or latest ASTM edition	Standard Methods by the American Society of Testing and Materials for fuel analysis

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; 40 CFR 60 Subpart D]

Subsection B. Emissions Units 003, 004

- **B.19.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- **B.20.** Annual Compliance Tests Required. Except as provided in Specific Condition **B.27**., during each federal fiscal year (October 1st to September 30th), each EU003 and EU004 shall be tested to demonstrate compliance with the emissions standards for PM, VE, SO₂ and NO_X. [Rule 62-297.310(7), F.A.C.]
- B.21. Compliance Tests Prior To Renewal. Except as provided in Specific Condition B.27., compliance tests shall be performed for PM, VE, SO₂ and NO_X once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions B.6. B.10. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]
- **B.22.** Compliance Testing Required. The owner or operator shall conduct emission testing in accordance with the requirements of 40 CFR 60.46. [40 CFR 60.46]
- B.23. Annual RATA Tests May Substitute for Annual NO_x and SO₂ Tests. Annual RATA tests performed for NO_x and SO₂ 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 at least 15 days prior to the date on which each formal compliance test is to begin and the results must be submitted as the compliance tests no later than 45 days after the last sampling run of each test is completed. The test runs shall be consecutively completed in a manner that fulfills the test length requirements of the EPA test methods. [40 CFR 75; Request of applicant, February 11, 1998]
- B.24. SO₂ Fuel Analysis. The permittee shall demonstrate compliance with the SO₂ limit in specific condition
 B.8.a. by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition
 B.25. [Rule 62-213.440, F.A.C.; Permit No. 0170004-006-AC]
- **B.25.** <u>SO₂ Alternate 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 fuel sulfur standard:
 - a. Methods. 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. Recordkeeping. Record daily the amount of coal fired, the density (<u>fuel oil</u>) of each fuel, the Btu value, and the percent sulfur content by weight of each fuel.
 - c. Calculations. Utilize the information in a. and b., above, to calculate the SO₂ emission rate to ensure compliance at all times.

[Rule 62-213.440, F.A.C.; Permit No. 0170004-006-AC]

- B.26. <u>VE</u>. The test method for VE 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 62-296.405(1)(e)1. and 62-297.401, F.A.C.]
- **B.27.** 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.]

Recordkeeping and Reporting Requirements

B.28. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Subsection B. Emissions Units 003, 004

Report	ort Reporting Deadline	
Notice of Excess Emissions	Postmarked by the 30 th day following the	B.13. and B.29
2. 2 Extragions	end of each quartersix-month period	2.10. 414 2.27

- **B.29.** Excess Emission Reports. Excess emissions, as defined in 40 CFR 60.45(g), shall be reported in accordance with the requirements of 40 CFR 60.45(g). [40 CFR 60.45(g)]
- **B.30.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

B.31. These emissions units are also subject to condition **J.1.** contained in **Subsection J. Used Oil Common Condition.**

Subsection C. Emissions Units 006, 008, 009, 010

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description	
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	

Emissions unit 006 (EU006) 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 (ESP) to the fly ash storage silo (Source 3) at a design transfer rate of 44 tons per hour. PM emissions are controlled by a Monex Resources, Inc. Model MD80 baghouse at a design air flow of 1820 acfm

Emissions unit 008 (EU008) 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 ESP 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. PM 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 (EU009) 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. PM emissions are controlled by a Monex Resources, Inc. Model MD80 baghouse at a design air flow of 2200 acfm.

Emissions unit 010 (EU010) 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. PM 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.}

Essential Potential to Emit (PTE) Parameters

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

EU No.	Transfer Rate (tons per hour)
006	44
008	174
009	60
010	70

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C.]

- C.2. <u>Emissions Unit Operating Rate Limitation After Testing.</u> See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- C.3. <u>Hours of Operation</u>. The emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Subsection C. Emissions Units 006, 008, 009, 010

- C.4. <u>Additional Reasonable Precautions for Control of PM Emissions</u>. The owner or operator shall take the following reasonable precautions to control emissions of PM from transport of ash from EU008 for disposal or use:
 - a. Ash for transport shall be wetted before loading into open trucks,
 - b. Dry ash shall be transferred to enclosed tanker trucks.

[Permit No. AC 09-256791]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions C.5.—C.6. are based on the specified averaging time of the applicable test method.

C.5. <u>PM Emission Limitations</u>. Emissions of particulate matter from the following emissions units shall not exceed:

EU No.	Emission Limit (pounds per hour)	Emission Limit (tons per year)
006	3.5	15.4
008	0.6	2.6
009	2.2	9.6
010	2.2	9.6

[Permit No. AC09-256791; BACT Determinations dated 2/5/79 and 8/16/79]

C.6. <u>VE.</u> VE from each of the Units 1 and 2 flyash handling system baghouse exhaust stacks shall not exceed 5% opacity. See Specific Condition C.13. [Permit No. AC09-256791; BACT Determinations dated 2/5/79 and 8/16/79]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- C.7. Excess Emissions Allowed. 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.]
- C.8. <u>Excess Emissions Prohibited.</u> 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.]

Test Methods and Procedures

C.9. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method Description of Method and Comments	
9	Visual Determination of the Opacity of Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions from material Sources and Smoke Emissions from Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [62-297.401, F.A.C., Permit No. AC 09-256791]

Subsection C. Emissions Units 006, 008, 009, 010

- C.10. <u>Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- C.11. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each EU006, EU008, EU009 and EU010 shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C. and Permit No. AC 09-256791]
- C.12. Compliance Tests Prior To Renewal. Compliance tests shall be performed for VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions C.6. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]
- C.13. VE in Lieu of Stack Test. Due to the expense and complexity of conducting a stack test on minor sources of PM and because the ash handling system emissions units are controlled with baghouses, the Department, pursuant to Rule 62-297.620(4), F.A.C. will consider compliance with 5% VE limitation (See Specific Condition C.6.) as reasonable assurance of compliance with the PM emission limitations in Specific Condition C.5. in lieu of particulate stack tests. If the Department has reason to believe that the particulate emission standard applicable to each emissions unit (006, 008, 009 and 010) is not being met, it may require that compliance be demonstrated by stack testing in accordance with Chapter 62-297, F.A.C. [Permit No. AC09-256791; BACT Determination dated 2/5/79]
- C.14. <u>VE.</u> Compliance for VE shall be demonstrated using EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C. and referenced in Rule 62-297, F.A.C.
- C.15. Specific VE Test Requirements. Each test shall be a minimum of thirty minutes in duration. Separate VE tests shall be conducted on each of the baghouse filter/separate exhausts (total of four emission points to be tested). VE testing shall be conducted while transferring fly ash from both FFSG Units 1 and 2 to the silo (EU008) 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. [Permit No. AC 09-256791]

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

Recordkeeping and Reporting Requirements

- C.16. <u>Daily Log.</u> 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] Comment: This is not required in our current TV permit. The above record-keeping is required in sections III A & B
- C.17. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Subsection D. Emissions Unit 014

The specific conditions in this section apply to the following emissions unit:

	EU No.	Brief Description	
ſ	014	Bottom ash storage silo for FFSG Units 1 and 2	1

Emissions unit 014 (EU014) 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.}

Essential Potential to Emit (PTE) Parameters

- D.1. Permitted Capacity. The maximum rate of transfer of ash from Units 1 and 2 to the ash storage silo shall not exceed 16 tons per hour (8 tons per hour from each FFSG unit). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC 09-235915]
- **D.2.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- **D.3.** Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]
- D.4. <u>Additional Reasonable Precautions for Control of PM Emissions</u>. The owner or operator shall take the following reasonable precautions to control emissions of particulate matter from transport of ash from EU014 for disposal or use:
 - a. Ash for transport shall be wet via a pugmill before loading into open trucks,
 - b. Dry ash shall be transferred to enclosed tanker trucks.

[Permit No. AC 09-235915]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions $\mathbf{D.5.} - \mathbf{D.6}$, are based on the specified averaging time of the applicable test method.

- D.5. <u>PM Emissions</u>. The maximum allowable emission rate of PM from the bottom/economizer ash handling system for a maximum process transfer rate of 8 tons per hour per unit is 13.03 pounds per hour as set by the Process Weight Table contained within Rule 62-296.320(4), F.A.C. At lesser process rates the allowable emission rates can be determined front the appropriate equation. This limitation represents total combined PM emissions from the two filter/separator exhausts and the bin vent filter exhaust. [Permit No. AC09-235915]
- D.6. <u>VE Limitation</u>. Due to the expense and complexity of conducting a stack test on minor sources of PM, and because this ash handling system is equipped with baghouse control devices, the Department, pursuant to Rule 62-297.620(4), F.A.C., establishes a VE limitation not to exceed an opacity of 5% in lieu of a PM stack test. This limitation applies to emissions from the two filter/separator exhausts and to the bin vent filter exhaust. [Permit No. AC09-235915]

Excess Emissions

Subsection D. Emissions Unit 014

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- D.7. <u>Excess Emissions Allowed</u>. 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.]
- **D.8.** Excess Emissions Prohibited. 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.]

Test Methods and Procedures

D.9. <u>Test Methods</u>. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments	
9	Visual Determination of the Opacity of Emissions from Stationary Sources	

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.; Permit No. AC09-235915]

- D.10. <u>Common Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- D.11. <u>Annual Compliance Tests Required</u>. During each federal fiscal year (October 1st to September 30th), EU014 shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C.; Permit No. AC09-235915]
- D.12. Compliance Tests Prior To Renewal. Compliance tests shall be performed for VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions D.6. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.; Permit No. AC09-235915]
- D.13. VE. Each emission point of EU014 shall demonstrate compliance using 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. The minimum requirements for stationary point source emission test procedures shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60 Appendix A. [Permit No. AC09-235915]
- D.14. Specific VE Test Requirements. The visible emissions test shall be a minimum of thirty minutes in duration. Separate VE tests shall be conducted on each the filter/separator exhausts and the bin vent filter exhaust (total of three emission points to the tested). Tests shall be conducted with both Units 1 and 2 transferring ash to the storage silo at the same time. A statement of the approximate ash transfer rate during the test shall be submitted with each test report. Failure to submit the process transfer rate and or operation under conditions that are not representative of normal operations may invalidate the test and fail to provide reasonable assurance of compliance. Unit load will be utilized to assure 90 to 100% capacity during testing. [Permit No. AC09-235915] Comment: the above stricken language is not in our current TV permit. There is no system to measure the ash flow rate. The plant staff currently use unit load to assure they are operating at 90 to 100% capacity.

Recordkeeping and Reporting Requirements

D.15. Reporting Ash Transfer Rate. A statement of the approximate ash transfer rate during the test shall be submitted with each compliance test report. Failure to submit the process transfer rate and or operation under

Subsection D. Emissions Unit 014

conditions that are not representative of normal operations may invalidate the test and fail to provide reasonable assurance of compliance. Unit load will be utilized to assure 90 to 100% capacity during testing. Unit load shall be submitted with each compliance test report. [Permit No. AC 09-235915]

D.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Subsection E. Emissions Unit 012

The specific conditions in this section apply to the following emissions unit:

	EU No.	Brief Description
ſ	012	Three relocatable diesel generator(s)

Emissions unit 012 (EU012) consists of three relocatable Caterpillar Model 3508-DITA 820 kilowatt (kW) diesel generators. Each relocatable diesel generator has a maximum heat input of 8.58 MMBtu/hr. Each generator is fueled by new No. 2 fuel oil per hour with a maximum rating of 820 kilowatts. Each generator has its own stack. Emissions from the generators are uncontrolled, and therefore, are not subject to CAM.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. This section of the permit is only applicable when the generators are located at the Crystal River Power Plant. These relocatable generators were permitted in 1991 under permit No. AC09-202080.}

Essential Potential to Emit (PTE) Parameters

E.1. <u>Permitted Capacity</u>. The maximum (combined) allowable heat input rate and fuel firing rate is as follows:

EU No.	MMBtu/hr Heat Input	Gallons/hour	Fuel Type
012	8.58 (each generator)	62.1	New No. 2 Fuel Oil

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C.; and, Permit No. AC09-202080.]

- E.2. <u>Methods of Operation Fuels.</u> Only new No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight, shall be burned in this unit. [Permit No. AC09-202080]
- **E.3.** Hours of Operation. The hours of operation expressed as "engine-hours" shall not exceed 2,970 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.; Permit No. AC09-202080.]
- E.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions E.5. - E.6. are based on the specified averaging time of the applicable test method.

- E.5. <u>VE.</u> VE shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.; Permit No. AC09-202080]
- E.6. SO₂ Sulfur Content. The new No. 2 fuel oil sulfur content shall not exceed 0.5%, by weight. [Permit No. AC09-202080]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

E.7. Excess Emissions Allowed. 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.]

Subsection E. Emissions Unit 012

E.8. Excess Emissions Prohibited. 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.]

Test Methods and Procedures

E.9. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources
ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or later editions	Standard Test Methods for Sulfur in Petroleum Products

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, 62-297.401 and 62-297.440, F.A.C.]

- E.10. <u>Common Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- E.11. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), EU012 shall be tested to demonstrate compliance with the emissions standards for VE. Annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year. [Rules 62-297.310(7), and 62-297.310(7)(a)4. & 8., F.A.C.]
- E.12. Compliance Tests Prior to Renewal. Except as provided for in condition TR7. of Appendix TR, Testing Requirements, EU012 shall be tested for the following pollutant prior to obtaining a renewed operation permit: VE. [Rule 62-297.310(7)(a)3., F.A.C.]
- E.13. <u>VE</u>. The test method for VE shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800. F.A.C., and referenced in Chapter 62-297, F.A.C. [Rule 62-297.310(4), F.A.C.; Permit No. AC09-202080]
- E.14. SO₂ Sulfur Content Testing. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D1552-90 or later editions, ASTM D2622-94, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or later editions. In addition, any ASTM method (or later editions) referenced in Rule 62-297-440(1) F.A.C., or in 40 CFR 60.335 (b)(10) is acceptable. [Rules 62-213.440 and 62-297.440, F.A.C.]
- E.15. <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. [Rule 62-213.440, F.A.C.]
- **E.16.** Testing 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 to demonstrate compliance with the permit limits in this section. [Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; Permit No. AC09-202080]

Testing Operating Rate. Operating Rate During Testing. Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate for each generator. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the

Subsection E. Emissions Unit 012

maximum operation rate allowed by the permit); in this case, subsequent emissions unit operations may be limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Failure to submit the actual operating rate may invalidate the test.

E.17. —[Rule 62-297.310(2), F.A.C.; and, AC 09-202080] Testing of each diesel-generator emissions must be accomplished while operating the diesel-generator within ±10% of the maximum fuel firing rate of 62.1 gallons per hour. Failure to submit the actual operating rate may invalidate the test. [Permit No. AC09-202080] Comment: the current TV permit utilizes the above wording, we prefer this wording as it allows more flexibility in determining the test operating rate (fuel flow may difficult to measure). Electrical output may be a better indicator

E.17. Recordkeeping and Reporting Requirements

- E.18. Recordkeeping. The owner or operator shall maintain the following records:
 - a. the daily hours of operation for each of the generators,
 - b. the daily hours of operation expressed as "engine-hours",
 - c. the cumulative total hours of operation expressed as "engine-hours" for each month, and
 - 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.; Permit No. AC09-202080]

- **E.19.** Relocation Notification. The permittee shall notify the compliance authority, 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.

[Permit No. AC09-202080]

E.20. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Other Requirements

E.21. PSD Avoidance. Specific conditions in construction permit AC 09-202080, limiting the "engine hours", were accepted by the applicant to escape Prevention of Significant Deterioration review. If Progress Energy Florida, Inc. requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(4) – (12), F.A.C., as though construction had not yet begun. [Rule 62-212.400(12), F.A.C.; Permit No. AC 09-202080].

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 9 + Alignment: Left + Aligned at: 0" + Tab after: 0.5" + Indent at: 0.2"

Formatted: Font: Bold

Formatted: Font: Bold, Underline

Subsection F. Emissions Unit 013

The specific conditions in this section apply to the following emissions unit:

	EU No.	Brief Description	
I	013	Cooling towers for FFSG Units 1, 2 and Nuclear Unit 3	

Emissions unit 013 (EU013) is cooling towers for FFSG units 1, 2 and nuclear unit 3, used to reduce plant discharge water temperature. (This emission unit may be referred to as "helper cooling towers.") This emissions unit consists of four towers with nine cells per tower, with high efficiency (99.8%) drift eliminators, operating at a maximum seawater flow rate of 735,000 gallons per minute for all nine-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%.}

Essential Potential to Emit (PTE) Parameters

- F.1. Hours of Operation. The operating hours for each cooling tower pump shall not exceed 4320 hours per year (12-month rolling total). [Rule 62-210.200(PTE), F.A.C.; and, Permit No. AC 09-162037/PSD-FL-139]
- F.2. <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.; and, Permit No. AC 09-162037/PSD-FL-139)]

{Permitting 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.}

- F.3. Pump Run Time Meters Required. Each cooling tower seawater pump shall be equipped each with a run-hour meters. [Rule 62-213.440, F.A.C.; and, AC 09-162037/PSD-FL-139]
- F.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Conditions F.5. is based on the specified averaging time of the applicable test method.

F.5. <u>Cooling Tower Emission Limit</u>. The maximum allowable emissions of particulate matter form each cell (stack) is 11.89 lb/hr. This is based on a 0.004% drift rate (ratio of drift to the circulate rate) and the following table:

Flow Rate (gpm)	Total PM (from all 36 cells)		PM ₁₀	
Flow Rate (gpm)	lbs/hr	TPY	lbs/hr	TPY
735,000	428	925	214	462

(PM₁₀ is approximately 50% of total PM)

[Permit No.: AC 09-162037/PSD-FL-139, BACT]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

Progress Energy Florida, Inc. Crystal River Power Plant Permit No. 0170004-024-AV Title V Air Operation Permit Renewal

Subsection F. Emissions Unit 013

- **F.6.** Excess Emissions Allowed. 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.]
- F.7. Excess Emissions Prohibited. 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.]

Test Methods and Procedures

- F.8. <u>Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- F.9. Compliance Testing. Compliance tests, on a randomly selected cell (stack), to be selected by the Department, shall be conducted for each cooling tower while it is operated at 90—100% capacity. Such tests shall be conducted in accordance with 40 CFR 60 Appendix A, using EPA Method 5, or any other equivalent method approved by the Department. Specifically, when using EPA Method 5, a distilled eater rinse shall be used in place of acetone, and the impinge catch shall be excluded from emission calculations. The salt water flow rate during the compliance tests shall be determined using the manufacturer's certified pump curves, or any other equivalent method approved by the Department. If compliance test results indicate that the particulate emissions are greater than 80% but less than 100% of its allowable limit of 11.89 lbs/hr per cell (stack), the facility will be required to conduct another stack test within thirty months. Whereas, a particulate stack test will be required once every five years if the compliance test results show that the particulate emissions are below 80% of the 11.89 lbs/hr allowed limit. [Permit No. AC09-162037/PSD-FL-139]

Comment: the above wording is not in the current TV permit. The current TV permit requires the following preferred wording:

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

(a) Daily "walkdown" inspection of each operational cell visually checking for problems with the drift eliminators such as pluggage, algae build-up, and mechanical components (fans and pumps).

(b) Daily visual inspection of the cells which are in operation to ascertain the presence of higher than expected visible emissions when atmospheric conditions allow, and follow-up inspections and correction of problems when the daily visual inspection of the cells indicates a problem.

(c) Weekly visual inspection of the inlet water screens and prompt correction when broken sections or pluggage is discovered.

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

Recordkeeping and Reporting Requirements

- F.10. Pump Run Logs. A log shall be maintained of the hours of operation of each pump supplying salt water to the helper cooling towers. Pump flow rates shall be determined from the manufacturer's certified pump curves, or any other equivalent method approved by the Department. [Rule 62-213.440, F.A.C.; Permit No. AC 09-162037/PSD-FL-139]
- **F.11.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Formatted: Font: Not Bold

Subsection G. Emissions Unit 015

The specific conditions in this section apply to the following emissions unit:

	EU No.	Brief Description
I	015	Cooling towers for FFSG Units 4 and 5

Emissions unit 015 (EU015) 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.)}

Essential Potential to Emit (PTE) Parameters

- G.1. Permitted Capacity. The maximum seawater flow rate shall not exceed 331,000 gallons per minute per cooling tower. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., 62-204.800, F.A.C.]
- **G.2.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- **G.3.** 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

Unless otherwise specified, the averaging time for Specific Condition(s) G.4. is based on the specified averaging time of the applicable test method.

G.4. PM Emissions - Cooling Tower Emission Limit. PM emissions shall not exceed 175 lb/hr from each cooling tower. [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

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

{Permitting 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.}

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- G.5. 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.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

G.6. Excess Emissions Allowed. 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.]

Subsection G. Emissions Unit 015

G.7. Excess Emissions Prohibited. 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

G.8. Inspection. The drift eliminators of both towers shall be inspected from the concrete walkways not less than every three months by Progress Energy Florida staff or representatives to assure that the drift eliminators are clean and in good working order. Not less than annually, a complete inspection of the towers shall be conducted by a qualified inspector with recognized expertise in the field. Certification that the drift eliminators are properly installed and in good working order shall be provided in the record keeping and reporting requirements noted below. [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88].

Test Methods and Procedures

- G.9. <u>Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- G.10. 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 200313). 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 200212). [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]
- G.11. PM Emission Test Method. Testing shall be in accordance with following requirements:
 - a. PM emissions shall be measured by the sensitive paper method.
 - Testing shall be conducted either at the drift eliminator level within the tower or at the tower exit plane.
 (The sampling locations at the drift eliminator level and apparatus are shown in diagrams attached as Appendix P.)
 - c. No less than three test runs shall be conducted for each test and all valid data from each of these test runs shall be averaged to demonstrate compliance. No individual test run result shall determine compliance or noncompliance. The emission rate reported as a percent of the circulating water, as well as lb/hr., and total dissolved solids in the cooling tower basin and intake water, shall be reported for each test run. [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

Recordkeeping and Reporting Requirements

- G.12. Reporting. Reports on tower testing and inspection shall be handled as follows:
 - a. Maintained within onsite files within 30 days after all visual inspections of the drift eliminators.
 - b. Agency Submittal within 45 days after the compliance testing of either tower. [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]
- **G.13.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Subsection H. Emissions Unit 016

The specific conditions in this section apply to the following emissions unit:

EU No.		Brief Description
	016	Material handling activities for coal-fired steam units.

Emissions unit 016 (EU016) is material handling activities for coal-fired steam units. This emissions unit consists of a crane-operated clam-shell bucket mounted on a traveling gantry, enclosed conveyor belts, coal crushers and storage bunkers used for the storage and transport of coal, for FFSG Units 1, 2, 4 and 5. The barge unloading capabilities are 2,500 tons per hour and 32,000 tons per day. The speed of the conveyors and the crusher associated with boilers 1 and 2 is 900 tons per hour. This unit also encompasses fly ash and bottom ash handling equipment associated with Units 4 and 5 which are not addressed by other emissions units.

{Permitting notes: This emissions unit is regulated partially under Power Plant Siting Certification PA 77-09 (Units 4 and 5 only). and, is subject to NSPS 40 CFR 60 Subpart Y. This emissions unit is also regulated under permit number 0170004-014-AC (issued concurrently with this revised permit number 0170004-015-AV), which authorized the replacement of the barge unloading equipment to decrease the time required to unload coal barges, and the increase in conveying and crushing speeds of the equipment feeding coal to units 1 and 2.}

Essential Potential to Emit (PTE) Parameters

- H.1. Containment of Fugitive Emissions: To the extent possible, the equipment that comprises the coal processing equipment at this facility (crushers, conveyors, drop points, and storage bunkers) shall be covered or enclosed at all times when the equipment is in operation. Except for the barge load-out and the stacker reclaimer sections of the conveying system that are required by design to be open, and which are not specifically subject to regulation under 40 CFR 60 Subpart Y, any other open section of the coal processing equipment shall be required to have any annual emission test conducted upon it. [Permit No. 0170004-014-AC]
- H.2. <u>Emissions Unit Operating Rate Limitation After Testing.</u> See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- H.3. 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

Unless otherwise specified, the averaging time for Specific Condition **H.4** is based on the specified averaging time of the applicable test method.

H.4. <u>VE.</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, six minute average. [PPSC PA 77-09 (coal facilities associated with Units 1, 2, 4 and 5); and, Permit No. 0170004-014-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

H.5. Excess Emissions Allowed. 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.]

Subsection H. Emissions Unit 016

H.6. Excess Emissions Prohibited. 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.]

Test Methods and Procedures

H.7. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method Description of Method and Comments	
9 Visual Determination of the Opacity of Emissions from Stationary Sources	
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions form Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C., Permit No. 0170004-014-AC]

- H.8. <u>Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- H.9. <u>VE.</u> (This condition applies to coal facilities associated with emissions units 001, 002, 004 and 003 FFSG Units 1, 2, 4 and 5.) When required by the Department, or annually as specified in Specific Condition H.2., EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [40 CFR 60.254; and, Permit No. 0170004-014-AC]

{Permitting Note: Except as specified in Specific Condition H.9., annual testing is not being required because the regulated emissions points are either enclosed or confined within a building.}

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

Recordkeeping and Reporting Requirements

H.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Subsection I. Emission Unit 020

The specific conditions in this section apply to the following emissions unit:

	EU No.	Brief Description
ſ	020	Cooling towers for FFSG Units 1 and 2 used to reduce plant discharge water temperature.

Emissions unit 020 (EU020) is cooling towers for FFSG Units 1 and 2, used to reduce plant discharge water temperature. (This emission unit may be referred to as "portable cooling towers.") This emissions unit consists of 71 or 72 cells (dependent upon manufacturer), is 12' wide and 11' high, includes drift eliminators, operates at a maximum circulating seawater flow rate of 180,000 gallons per minute for all cells combined, and a design airflow rate of 25,000 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 drift eliminators.

{Permitting note(s): This emissions unit is regulated under Prevention of Significant Deterioration (PSD) (permit 0170004-010-AC) and includes a Best Available Control Technology (BACT) Determination, which allows for a drift emission rate of 0.0015% with limited usage.}

Essential Potential to Emit (PTE) Parameters

- I.1. Hours of Operation. The operating hours for the portable cooling towers shall not exceed an equivalent of 2920 hours per year of operation (12-month rolling total). This condition shall be complied with by limiting the circulating water flow usage through the portable cooling towers to 31.5 x 10⁹ gallons per calendar year. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0170004-010-AC)]
- I.2. <u>Drift Eliminators</u>. Drift eliminators shall be installed and maintained as per the manufacturer's specifications. Regular maintenance shall be scheduled to ensure proper operation of the drift eliminators. [Rule 62-213.440, F.A.C.; Permit No. 0170004-010-AC)]

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

I.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions 1.4. - 1.5. are based on the specified averaging time of the applicable test method.

- I.4. <u>Drift Rate.</u> The portable cooling towers shall be designed, operated and maintained to achieve a drift rate of no more than 0.0015% of the circulating water flow. [Permit No. 0170004-010-AC]
- **1.5.** PM Emissions. The drift rate standard in Specific Condition **I.4**. equates to an estimated emission rate of particulate matter (PM) from the cooling tower at 35.1 pounds per hour. [Permit No. 0170004-010-AC]

{Permitting Note: The emission limit is based on a BACT Determination setting the maximum drift emissions at 0.0015%. PM10 emissions are estimated to be approximately 6% of the particulate matter emission rate.}

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

1.6. <u>Excess Emissions Allowed</u>. 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.]

Subsection I. Emission Unit 020

1.7. Excess Emissions Prohibited. 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

1.8. Inspection Log: Any problems detected during the work practice inspections identified in Specific Condition-1.6_1.10. shall be documented in a log identifying the cell (or water screen), the inspector, the time (when discovered and the hours operated before the problem was corrected), and a description of the problem and the corrective actions taken. This log shall be maintained onsite and shall be made available to DEP upon request. The log shall be maintained so as to provide an indication as to whether routine inspections have been conducted as required even when there are no problems to record. [Rules 62-213.440 and 62-297.310(7), F.A.C., Permit No. 0170004-010-AC and ASP No. 00-E-01 dated June 7, 2000]

Test Methods and Procedures

- 1.9. <u>Common Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- 1.10. Emission Test Method. The drift elimination system on the helper cooling towers shall be maintained so as to minimize pluggage and to insure timely repair of broken sections of the drift eliminators. During those calendar days when the portable cooling towers are used, the following work practice shall be implemented, in lieu of EPA Method 5, to demonstrate compliance with the originally designed removal efficiency (no more than 0.0015% drift rate):
 - Walkdown Inspections. Daily "walkdown" inspection of each operational cell visually checking for problems with the drift eliminators such as pluggage, algae build-up, and mechanical components (fans and pumps).
 - b. Visual Inspections. Daily visual inspection of the cells which are in operation to ascertain the presence of higher than expected visible emissions when atmospheric conditions allow, and follow-up inspections and correction of problems when the daily visual inspection of the cells indicates a problem.
 - c. Weekly Inspections. Weekly visual inspections of the inlet water screens and prompt correction when broken sections or pluggage is discovered.

[Rule 62-213.440, F.A.C., Permit No. 0170004-010-AC; and ASP No. 00-E-01 dated June 7, 2000]

Recordkeeping and Reporting Requirements

- I.11. <u>Circulating Water Flow-Meters Required.</u> Circulating water flow will be measured by monitoring the hours of each circulating water pump. For each hour of operation, each north pump will flow 15 kgpm (900 kgph) and each south pump will flow 4 kgpm (240 khph). The fans in bank C1 through C15 will be monitored for operation. If any of the fans are operating in those cells, the circulating water flow will be 39 kgpm (2,340 kgph). Partial hours of operation shall be prorated. Records of circulating water flow shall be maintained for each calendar month. [Rule 62-213.440, F.A.C.; Permit No. 0170004-10-AC]
- 1.12 Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Subsection J. Common Conditions

The specific conditions in this section apply to the following emissions units:

EU 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.}

- **J.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.]
 - 1. Arsenic shall not exceed 5.0 ppm,
 - 2. Cadmium shall not exceed 2.0 ppm,
 - 3. Chromium shall not exceed 10.0 ppm,
 - 4. Lead shall not exceed 100.0 ppm,
 - 5. Total halogens shall not exceed 1000 ppm,
 - 6. Flash point shall not be less than 100 degrees F.
 - b. Quantity Limited: The maximum quantity of on-specification used oil that may be burned in all four emissions units combined is 10 million gallons in any consecutive 12-month period.
 - c. Used Oil Containing PCBs Not Allowed: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
 - d. PCB Concentration of 2 to less than 50 ppm: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.
 - Before accepting from each marketer the first shipment of on-specification used oil with a PCB concentration of 2 to 49 ppm, the owner or operator shall provide each marketer with a one-time written and signed notice certifying that the owner or operator will burn the used oil in a qualified combustion device and must identify the class of combustion device. The notice must state that EPA or a RCRA-delegated state agency has been given a description of the used oil management activities at the facility and that an industrial boiler or furnace will be used to burn the used oil with a PCB concentration of 2 to 49 ppm. The description of the used oil management activities shall be submitted to the EPA or may be submitted to the Administrator, Hazardous Waste Regulation Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400. A copy of the notice provided to each marketer shall be maintained at the facility. [40 CFR 279.61 and 761.20(e)]
 - e. Certification Required: The owner or operator shall receive from the marketer, for each load of used oil received, a certification that the used oil meets the specifications for on-specification used oil and contains a PCB concentration of less than 50 ppm. This certification shall also describe the basis for the certification, such as analytical results.
 - Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs. Note that a claim that used oil does not contain quantifiable levels of PCBs (that is, that the used oil contains less than 2 ppm of PCBs) must be documented by analysis or other

Subsection J. Common Conditions

information. The first person making the claim that the used oil does not contain PCBs is responsible for furnishing the documentation. The documentation can be tests, personal or special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the used oil contains no detectable PCBs.

- f. Testing Required: The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:
 - Arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs*, and specific gravity.
 - Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods), latest edition
 - * Analysis for PCBs is not required if a claim is made that the used oil does not contain quantifiable levels of PCBs.
- g. Record Keeping Required: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department: [40 CFR 279.61 and 761.20(e)]
 - 1. The gallons of on-specification used oil accepted and burned each month in each unit. (This record shall be completed no later than the fifteenth day of the succeeding month.)
 - 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.
 - 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.

[Rule 62-213.440, F.A.C.; 40 CFR 279 and 40 CFR 761; and Permit No. 0170004-002-AO]

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

Operated by: Florida Power Corporation dba Progress Energy Florida

ORIS Code: 0628

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

E.U. No.	Brief Description
001	FFSG, Unit 1.
002	FFSG, Unit 2
003	FFSG, Unit 5,
004	FFSG, Unit 4,

- A.1. The Phase II Acid Rain Part application 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 units must comply with the standard requirements and special provisions set forth in the applications listed below:
 - a. DEP Form No. 62-210.900(1)(a), dated 08/25/09, received 10/08/2009.
 - b. DEP Form No. 62-210.900(1)(a)1, dated 08/25/09, received 10/08/2009.
 - c. EPA Form 7610-28 (12-03), dated 08/25/09, received 10/08/2009.

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

A.2. Nitrogen oxide (NO_X) requirements for each Acid Rain Phase II unit are as follows:

E.U. ID#	J. ID# EPA ID NO _X Limit	
001	1	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO_X emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2010, 2011, 2012, 2013 and 2014. Under each plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.57 lb/MMBtu. In addition, this unit shall not have an annual heat input greater than 37,112,400 MMBtu. Also, see Additional Requirements a., b. and c., below.
002	2	Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO _X emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2010, 2011, 2012, 2013 and 2014. Under each plan, this unit's NO _X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.57 lb/MMBtu. In addition, this unit shall not have an annual heat input greater than 42,602,400 MMBtu. Also, see Additional Requirements a., b. and c., below.
Pursuant to 40 CFR 76.11, the Florida Department of Environme approves five (5) NO _X emissions averaging plans for this unit. If effective for one calendar year for the years 2010, 2011, 2012, 2 Under each plan, this unit's NO _X emissions shall not exceed the alternative contemporaneous emission limitation of 0.59 lb/MM.		Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves five (5) NO_X emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2010, 2011, 2012, 2013 and 2014. Under each plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.59 lb/MMBtu. In addition, this unit shall not have an annual heat input greater than 74,334,600 MMBtu.
004	Pursuant to 40 CFR 76.11, the Florida Department of Environmental approves five (5) NO _X emissions averaging plans for this unit. Each	

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

effective for one calendar year for the years 2010, 2011, 2012, 2013 and 2014. Under each plan, this unit's NO _X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.59 lb/MMBtu. In addition, this unit shall not have an annual heat input greater than 79,385,400 MMBtu.
Also, see Additional Requirements a., b. and c., below.

Additional Requirements

- a. Under the plan (NO_X Phase II averaging plan), the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.
- b. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only after the Alabama Department of Environmental Management, the Jefferson County (Alabama) Department of Health, the Georgia Department of Natural Resources and the Mississippi Department of Environmental Quality, have also approved this averaging plan.
- c. 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 requirements covering excess emissions.
- A.3. <u>Sulfur dioxide (SO₂) Emission Allowances</u>. SO₂ 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.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
 - No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
 - c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]
- A.4. Comments, notes, and justifications: None.

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

	This submission is:	☐ Revised ☐ Renewal	
STEP 1	Crystal River	FI.	628
Identify the source by plant name,	Plant name	State	ORIS/Plant Code
state, and ORIS or plant code.			

STEP 2 Enter the unit IDS for every Acid Rain unit at the Acid Rai source in column "a."

If unit a \$O₂ Opt-in unit, enter "yes" in column "b".

For new units or SO₂ Opt-in units, enter the requested information in columns "d" and "e."

		ь	c	đ	•
n sin	Unit ID#	SO ₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance	New or SO ₂ Opt-in Units Commence	New or SO ₂ Opt-in Units Marrillor
,		(1.00010)	with 40 CFR 72.9(c)(1)	Operation Date	Certification Deadline
•	1	No	Yes	N/A	N/A
	2	No	Yes	NA	N/A
d	4	No	Yes	N/A	N/A
~	5	No	Yes	N/A	N/A
			Yes		
			Yeş		
			Yes		

DEP Form No. 62-210.900(1)(a) - Form Effective: 3/16/08

Crystal River			
Plant Name (from STEP 1)			

STEP 1

Acid Rain Parl Requirements.

standard

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:

(3) Submit a complete Acid Rain Fart application (including a completnos plant) under 40 CFR Part T2 and Rules 92-214.320 and 330, FA.C., in accordance with the designations speciated in Rules 92-214.320, FA.C., and

(8) Submit in a timely manuser are supportmental information that the DEP determines is necessary in order to review an Acid Rain Part application and status or deny an Acid Rain Part application and status or deny an Acid Rain Part application and status or deny an Acid Rain Part application of the Acid Rain acid Rain Rain source and each Acid Rain unit at the source shalt:

(3) Operate the Acid Rain Part application or a supersecting Acid Rain Part issued by the DEP, and

(3) Here 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 mentaning requirements as provided in 40 CFR Part 75, and Rais 62-214,430, 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 inflations and emissions reduction requirements for suther distributions and emissions and emissions reduction requirements for suther distributions and emissions.

with the ACD (Can emissions similarions and similarions).

(3) The expansions of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other;

(3) The expansions of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other;

(bit and other provisions of the operating permit source.

(4) For applications including a SQ, Opk-in unit, a monitoring plan for each SQ, Opk-in unit must be authented with this application pur

CFR 74.14(a). For renewal applications for SQ, Opk-in units include on updated monitoring plan II applicable under 40 CFR 75.53(b). drements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutams o

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 deedline, in the unit's compliance subsecount (after deductions under 40 CFR 73.34(c)), or in the compliance subsecount of another Acid Rain unit at the same source so the settent provided in 40 CFR 73.35(b)(3), not less than the total amoust emissions of salfur disorde for the previous catendary year from the unit; and
(ii) Comply with the applicable Acid Rain emissions finations for salfur disorders that closed emitted in excess of the Acid Rain emissions finations for salfur disorders.

(4) Each terre was recommended and the subject to the requirements under paragraph (1) of the author diocide requirements as follows:

(3) An Acad Rain unit shall be subject to the requirements under 40 CFR 72.6(a)(Z); or

(3) Starring January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(Z); or

(3) Starring on the later of January 1, 2000, or the deads ne for monitor cartification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(Z);

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain

Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the estandar year for which the allowance was allocated.

(8) 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 Program. No provision of the Acid Rain Program, the Acid Rain Program. The Acid Rain Program and the United States to terminate or limit such authorization.
(7) An allowance eleccated by the Administrator under the Acid Rain Program does not considute a properly right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the antificiable Acid Rain enteraions limitation for discount exists.

Excess Emissions Requirements.

(1) The designated representate required under 40 CFR Part 77.

required enterer so the rest Y / .

(3) The owness and operations of an Acid Rein until that has excess emissions in any calendar year shall.

(1) Pay selfowd termed the paresty required, and operation demand the interest on that penalty, as required by 40 CFR Parl 77; and

(6) Comply with the learns of an approved other pien, as required by 40 CFR Parl 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operation of the source and each Acid Rein unit at the source shall keep on size at the source each of the following documents for a pasied of 5 years from the date the document is created. This period may be extended for cause, at any temp prior to the end of 5 years, in whiting by the EPA or the DEP.

(i) The certificate of representation for the designated representative for the source and acid Rein unit at the source and all documents that cernorables the fund of the statements in the certificate of representative, in accordance with Rel e2-2-14, A.C.; provided that the certificate and documents shall be retained on size at the source beyond such 5-year period until such documents are supersected because of the submission of a new certificate of representation changing the designated representative.

(a) All smissions monitoring information, in accordance with 40 CPR Part 75, provided that to the occasi that 40 CPR Part 75 provides for a 3-year period for recording-enging, the 3-year period shall apply.

(b) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and.

DEP Form No. 62-210.900(1)(a) - Form Effective: 3/16/08

Crystal River	
Plant Name (from STEP 1)	

STEP 3,

Recordiceping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain Part explication and any other automission 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 snit 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.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Past, or an examption under 40 CFR 7.2.7 or 7.2.8, including any requirement for the payment of any penelty owed to the United States, shall be subject to enforcement pursuant to section 114(p) of the Acid.
 (2) Any person who knowingly malters a lates, maintife statement in any record, submission, or report under the Acid Rain Program shall be subject to oriented electrograms pursuant to section 113(p) of the Acid and 18 U.S.C. 1001.
 (3) No germit revision shall accuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an examplism under 40 CFR 72.7or 72.8 shall be

- No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 12, 7or 7.2.5 shall be constituted are:

 (1) Except as expressely provides in 18te IV of the Act, enempting or excluding the conners and operators and, to the extent applicable, the designated expresentative of an Acid Rain acustor or Acid Rain unit form compliance with any other provisions of the Act, including the provisions of the Act, including any program is an act of the Act, including any program is an act of the Act, including any program is an activity of the Paders Exempt Regulatory Commission under the Federal Power Act, or, (5) intentioning with or impairing any program is of competitives bidding for power supply in a state in which such program is established.

STEP 4 For 80₂ Opt-in units only.

In column "I" entr the unit ID# for every SO₂ Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach diagrams on the hustian unit's

in column "h" enter the hours.

	f	9	h (not required for renewal application)
×	Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application
1			
1			
			

DEP Form No. 82-210.900(1)(a) - Form Effective: 3/16/08

	Crystal River			7		
	Plant	Name (from STEP 1)		_		
				·	,	
STEP 5 For SO: Opt-in	1	ı	k	1	m	n
units only. (Not required for 802 Opt-in renewal					Current	Current Promulasted
applications.)	Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20	Actual SO ₂ Emissions Rate under 40 CFR 74.22	Allowable 1985 SO ₂ Emissions Rate under 40 CFR 74.23	Allowable SO ₂ Emissions Rate under 40 CFR 74.24	SO ₂ Emissions Rate under 40 CFR 74.25
the unit ID# for		(mmBtu)	(lbe/mmStu)	(libs/mmBlu)	(lbs/mm8tu)	(Ibs/mmBtu)
unit identified in column "a" (and in	1					
column "f").	2					
For columns "j" through "n," enter	5					
the information required under 40 CFR 74.20-74.25						······
and attach all supporting						· ·
documentation required by 40 CFR 74.20-74.25.						
	L					
STEP 6 For SO, Opt-in units only. Attach additional requirements, certify and sign.	8. A statement who. C. A statement who. D. Attach a comple. The designated CFR 74.51. Fo. F. The following at the combustions.	in source seeks to qualify in plan as provided in 40 CFR either the combustion unit is not at the combustion unit is not at 40 CFR 72.7, 72.8, or 72. the compliance plan for SO, representative of the comb renewal application, submi atement must be signed by source: 1 certify faut the di- combustion source and he combustion source and he	74.47 for combustions previously an affit to affected unit und 14. 2 under 40 CFR 72.4 unition unit shall sub-lit an updated monitor the designated repriate submitted under a submitted under as submitted under the designated under the desi	in sources must be at acted unit under 40 C fer 40 CFR 72.6 and 6 0. mit a monitoring plan ring plan if applicable asentative or atternate 40 CFR Part 74, Sup 40 CFR Part 74, Sup	tached. FR 74, toes not have an in accordance with 4 under 40 CFR 75.50 designated represe	O ((b). ntative of
	Signature		,	Date		
STEP 7	Certification (fo	r designated represent	stive or alternate	designated repre	sentative only)	
Read the certification statement; provide name, title, owner company name,	is made. I certify unde	to this submission on behalf of it penalty of law that I have para technients. Besed on my impu- lation are to the best of my know terments and information or o mi	onally examined, and a	m familiar with, the states	nents and information at	abmitted in this
phone, and e-mail address; sign, and date.	Name Brenda	E, Brickhouse	n	tle Director - Envi	ronmental Health an	d Safety
	Owner Company N	ame Florida Power Cor	poration dba Progre	ss Energy Florida, inc	.	.
	Phone 727 820 5	153	E-mail address Bri	nda.brickhouse@pgr	mail.com	
	Signature 2	Man	u	Date	125/09	

DEP Form No. 62-210.900(1)(a) - Form Effective: 3/18/08

Progress Energy Prortua, Inc. Crystal River Power Plant

Florida Department of Environmental Protection

Phase II NO_x Averaging Plan

This submission is: New X x Revised

œ T	E۵	4

Plant Name			(a) Emission	(b) Alt. Conlemp. Emission	(c) Annual Heat Input
Asheville	State	ID#	Limitation 0.45	Limitation 0.15	Limit 9,773,847
VPIACAINE		1	0.40	0.13	8,113,041
Asheville	NC	Z	0.46	0.15	9,627,813
Cape Fear	- NC	5	0.040	0.35	
		L_			6,185,400
Cape Fear	NC	6	0.040	0.35	7,612,800
H. F. Lee	NC	1	0.40	0.60	5,758,095
H. F. Lee	NC	2	0.46	0.50	5,649,210
H. F. Lee	NC	3	0.46	0.47	13,417,580

STEP 2

and the ISU-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former mus be less than or equal to the

Blu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed sveraging plan

0.44

 $\frac{\sum_{i=1}^{n} (R_{Li} \times HI_i)}{\sum_{i=1}^{n} HI_i}$

Stu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 78.7

 $\frac{\sum_{i=1}^{n} \left[R_{li} \times HI_{i} \right]}{\sum_{i=1}^{n} HI_{i}}$

Where, Ru

Alternative contemporaneous annual emissions limitation for unit i, in 16/mm8tu, as specified in column (b) of Step 1; Applicable emission limitation for unit i, in ib/mm8tu, as specified in column (a) of Step 1; Annual heat input for unit i, in mm8tu, as specified in column (c) of Step

≤

≤

HI,

1; Number of units in the averaging plan

DEP Form No. 62-210.900(1)(a)1. Effective: 3/16/08

	Crystal River Power Plant
	Plant Name (from Step 1)
	X This plan is effective for calendar year2010 through calendar year
STEP 3	unless notification to terminate the plan is given.
Mark one of the two aptions and enter dates.	☐ Treat this plan as ☐ identical plans, each effective for one calendar years for the following calendar years: and unless notification to terminate one or more of these plans is given.
STEP 4	Special Previsions
Read the special	Emission Limitations
provisions and certification, enter the name of the designated representative, and sign and date.	Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO, under the plan only if the following requirements are met:
	(i) For each unit, the unit's actual annual average emission rate for the calendar year, in bimmBu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and (a) For each unit with an atternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CPR 76.5, 76.5, or 76.7, the actual annual heat input limit in the averaging plan. (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CPR 76.5, 76.5, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan. or (i) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CPR 76.11(d)(1)(3)(A) and (B), that the actual Btu-weighted annual everage rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CPR 76.5, 76.6, or 76.7. (iii) If there is a successful group showing of compliance under 40 CPR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (ii).
	Liability
	The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at thet unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.
	Termination
	The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.
	Certification
	I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that i have personally examined, and am familiar with, the statements and information submitted in this obcument and all its attachments. Besed on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are (o the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submisting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.
Name Brenda E. Brickhouse	
Signature - 1	200 Date 8/25/09

Progress Energy Prortua, me. Crystal River Power Plant

DEP Form No. 62-210.900(1)(a)1. Effective: 3/16/08

1	Crystal River Power Plant
ı	Plant Name (from Step 1)

STEP 1
Continue the identification of units from Step 1,

	1		(a)	(b)	(c)
Plant Name	State	ID#	Emission Limitation	Alt. Contemp. Emission Limitation	Annual Heat Input Limit
Mayo	NC	1A	0.46	0.15	16,685,025
Мауо	NC	1B	0.46	0.15	16,685,025
H.B. Robinson	sc	1	0.40	0.525	12,879,540
Roxboro	NC	1	0.46	0.145	16,254,975
Roxboro	NC	2	0.40	0.145	32,789,849
Roxboro	NC	3A	0.46	0.235	17,651,860
Roxboro	NC	3B	0.46	0.235	17,651,860
Raxbaro	NC	4A	0.46	0.225	17,928,281
Roxboro	NC	4B	0.46	0.225	17,928,281
L.V. Sutton	NC	1	0.40	0.605	6,536,531
L.V. Sutton	NC	2	0.46	0.605	6,725,250
L.V. Sutton	NC	3	0.46	0.50	28,232,325
Weatherspoon	NC	1	0.46	1.00	3,746,925
Weatherspoon.	NC	2	0.46	1.00	3,798,165
Weatherspoon	NC	3	0.40	0.65	6,141,480
Crystal River	FL	1	0.40	0.57	37,112,400
Crystal River	FL	2	0.40	0.57	42,602,400
Crystal River	FL	4	0.46	0.59	79,385,400
Crystal River	FL	5	0.46	0.59	74,334,600
	<u> </u>	 	 		
		 			
			 		
	 	+		 	
		- 1	1	ii	

DEP Form No. 62-210.900(1)(a)1 Effective: 3/16/06

Crystal River Power Plant	
Plant Name (from Step 1)	

STEP 1

Continue the identification of units from Step 1, page 1, here.

			(a)	(b) Alt.	(c)
Plant Name	State	ID#	Emission Limitation	Alt. Contemp. Emission Limitation	Annual Heat Input Limit
				ļ	
					
	<u> </u>				
	+				
		1		<u> </u>	
		ļ <u>.</u>			
1-4		ļ <u></u>			
	 				
	-				
		-			
	 				
	 	-			
	 	<u> </u>	ļ		
	-	ļ			
	-				

DEP Form No. 82-210.900(1)(a)1. Effective: 3/16/08

	United States Environmental Protection Agency OMB No. 2060-0258 Acid Rain Program								
S BA	Phase II NO _X Compliance Plan For more information, see lastructions and refer to 40 CFR 78.11 NO, Compliance - Page 1								
	This submissi	_	X Revis		Page	1 of 2			
STEP 1 Indicate plant name, State, and ORIS code from NADB, if applicable	Crystal River				FI State	628 ORIS Code			
STEP 2	Identify each affi for cell burner, " and "ME" for we	octed Group 1 and Group CY" for cyclone, "DBW" : bettern. Indicate the co	2 boiler using the lic for dry bottom walf-fi mollence button sele-	niler 10# from NADE red, "T" for tangent cted for each unit.	, if applicable. Id laily fired, "V" fo	ndicate boiler type: "CB" r vertically fired,			
	iO# 1	1D# 2	ID# 4	ID# 5	ID#)D#			
	Туре Т	Тура Т	Type DBW	Type DBW	Туре	Туре			
(n) Standard annual average emission limitation of 0.50 Spirombtu (for <u>Phase i</u> dry buttorn vuoli-firad bollore)									
(b) Standard ennual everage emission limitation of 0.45 Submittle, (for <u>Phase i</u> langentally fired bollers)									
(c) EFA-approved early election plan under 49 CFR 76.8 through 12/3187 (also indicate above emission limit specified in plan)									
d) Standard annual average emission limitation of 0.46 infamility (for <u>Chans II</u> dry bottom wall-freet bollers)									
(n) Standard annual average emission limitation of 9.68 falmmBts (for <u>Physe I</u> tangerdially fired bollers)									
(f) Standard annual average erologica limitation of 6.65 (bimmStu (for cell burner bellers)									
(g) Standorf annual average emission limitation of 8.86 laimmSts (for cyclone ballers)									
(b) Standard zenuel average emission limitation of 0.00 lammits (for vertically fired to flore)									
(2) Standard annual average emission limitation of 6.64 Referentiation bettern believs)									
(I) NO, Averaging Plan (include NO, Averaging form)	X	X	X	X					
(ii) Common stack pursuant to 46 CFR 76.17(a)(2)(a)(A) (check the standard control similation box above for most atriogent limitation applicable to any unit difficing stack.									
(i) Common stack persented to 40 CPR 75.17(a)(2)(i)(ii) with NQ, Averaging letteck the NQ, Averaging Plan best and include NQ, Averaging form)									
EPA Form 7610-28 (12-03)									

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

	Crystal River	m Step 1)			NO _s Com Page 2	plance - Page 2 of 2
STEP 2, confd	ID#	ID#	ID#	ID#	IDW .	ID#
	Туре	Туре	Туре	Туре	Туре	Туре
on) EPA-approved common statk apportionment method parament to 40 CFR 75.17 (n)(2)(h)(C), (n)(Z)(h)(R), or (h)(Z)						
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renoval form as appropriate)						
(c) Potition for AEL, deliterateden period or final AEL, under review by U.S. EPA or						
demanatration period engolog (p) Repaisoring estantion plan approved or under review						
name of the designated representative, eign & date.	Nitropen Onides, tentilation for NO, Lishility. The onviolation of the pix 2000, for fulfilling 12000, for fulfilling 12000, for fulfilling 12000, for fulfilling 120000, for fulfilling 1200000, for fulfilling 120000, for fulfilling 1200000, for fulfilling 120000000, for fulfilling 12000000000000000000000000000000000000	as provided unides i ners and operations on or 40 CFR 76.8 as the obligation of each proposed early well- per for which a termid dearly election plan representation of the period proposed and the period proposed and and the period period of the period	ned by an approved e IO CRR 76.8(a)(2) esto of a unit governed in it that unit. The owner sited in 40 CRR year sited in 40 CRR year that be in a site in a site in a site in a site in a site rate in a site in a site seried beginning Jenus bent to which the bent for which the bent is new early elect or may terminate the pirate bent of the termination bent of the termination carried and of the termination of the carried of the termination of the carried of the termination of the termination of the carried of the termination of the termination of the carried of the termination of	apt as provided under an approved early els and operators shalf, lect only until the earl is effect. If the deap compliance with the any t of the tirst year minate the plan. The less is a follow to plan. The design an any year prior to 2 more applicable of the tirst year and the plan. The design an any year prior to 2 more applicable of the plan. The design and any year prior to 2 more applicable of the plan that early election plan adding the plan that the applicable where and operators alty of law that I have is document and all starking the informatic accurate, and comp	of 40 CFR T6.9(s)(3) of total plants of the liable, beginning for of January 1, 20 manuary 1, 20 man	(B). 3 January 1, 3 January 1, 5 January 1, 5 January 1, 5 or the unit 1 limitation under tes effect and effect and the of the unit pril a new early for 40 CPR is terminated astern 40 CPR is terminated for NO, for for NO, for are or effected d, and are sed on my tatements and
	Signature	0000	Date	8/2CS/CJ		
			1 048			

EPA Form 7610-28 (12-03)

riogiess Ellergy Fiorida, Ilic. Crystal River Power Plant Title V Air Operation Permit Renewal

SECTION V. CAIR PART.

Clean Air Interstate Rule Provisions

Clean Air Interstate Rule (CAIR).

Operated by: Florida Power Corporation dba Progress Energy Florida

Plant: Crystal River Power Plant

ORIS Code: 628

The emissions units below are regulated under the Clean Air Interstate Rule.

EU No.	EPA Unit ID#	Brief Description
001	1	Fossil Fuel Steam Generator (FFSG) Unit 1
002	2	FFSG Unit 2
003	5	FFSG Unit 3
004	4	FFSG Unit 4

1. Clean Air Interstate Rule Application. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b)) dated March 16, 2008, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

Clean Air Interstate Rule Provisions

This submission is:									
STEP 1	Plant Name: CR	YSTAL RIVER POV	VER PLANT		State: Floride	ORIS	or EIA Plant Co		
identify the source by plant name and ORIS or EIA plant code						628			
STEP 2		ь	6		1		·		
In column "s" enter the unit 105 for every CAR unit at the CAR source. In columns "b." "c."	Unit (Dif	Unit will hold nitrogen cuides (NOx) allowences in secondance with 40 CFR 96.106(c)(1)	Unit will hold suffer dioxide (SO ₃) allowences in accordance with 40 CFR 96.206(c)(1)	Unit will hald NO _X Ozon Sesson allowances in accordance with 40 CFR 98.305(c)(1)	Expects		New Units Expected Monitor Certificatio		
and "d," Indicate to which CAIR program(s)	1 or E.U001	X	x	×					
each unit is subject by placing an "X" in the	2 or E.U002	×	x	×					
column(s).	5 or E.U003	×	x	x					
For new units, enter the requested infermation in columns "e" and "f.	4 or E.U004	×	Х	x					
					_				
				<u> </u>			 		
					-		<u> </u>		
					+				
				<u> </u>	 				
			i	1					

Progress Energy Florida, Inc. Crystal River Power Plant Permit No. 0170004-024-AV Title V Air Operation Permit Renewal

SECTION V. CAIR PART.

Clean Air Interstate Rule Provisions



STEP 3

CRYSTAL RIVER POWER PLANT

Plant Hame (from \$150° 1)

CAIR NO. ANNUAL TRADING PROGRAM

CAIR Part Requirements.

- (1) The CARR designated representative of each CARR NO₆ source and each CARR NO₆ with at the source shall.
 (3) Submit to the DSP a complete and coeffice CARR Not form under 40 CPR 86.122 and Rule 93-286.476, F.A.C., in accordance with the designate specified in Rule 83-213.420, F.A.C.; and
 (3) The centers and operators of each CARR NO₆ source and each CARR NO₆ with at the source shall have a CARR Post included in the Title V operating partial leased by the DSP under 40 CPR Post 86. Subport CC, and operator the source and the until in compliance with such CARR Post.

Monitoring, Reporting, and Recorditecting Requirements.

umpro and operators, and the CARI designated representative, of each CARI MO_X source and each CARI MO_X unit at the se in the resultative, reporting, and recordingsing requirements of 40 CPR Part 60, Subport HH, and Rule 63-386.470, F.A.C. missions measurements recorded and reported in accordance with 40 CPR Part 60, Subport HH, shell be used to determine to by each CARI MO_X accurate with the following CARI MO_X Enterior Populations in

NO_x Emission Requirements.

- (1) An of the alterance transfer describes for a control period, the current and operators of each CAR NO_s source and each CAR NO_s units at the assurer forth label, for the center's compliance assured, CAR NO_s enhances evaluable for compliance debutions for the center) period under 40 CFR 98.196(g) in an amount not less than the tons of fatel NO_s embasines for the centred period from all CAR NO_s units at the season, as determined in accordance with 40 CFR Part 98, Subpart NH.

 (2) A CARI NO_s units and the outlies to the requirements under passages) (1) of the NO_s Requirements starting on the later of January 1, 2005, or the describes for meeting the unit's recriber certification requirements enter 40 CFR 86.1700(1) or (2) and for each centred parted thereafter.

 (3) A CARI NO_s allowances in enter a starting the unit's recriber the year for which the CARI NO_s (downers were affected).

 (4) CARI NO_s allowances and all the hold in, deducted the compliance with the meaning and the CARI NO_s Allowances with 40 CFR Part 88, Subparts FF and GG.

 (9) A CARI NO_s allowances in a femiliar described to enter an interest of the CARI NO_s Alexander Treating Program. No previous with 40 CFR Part 88, Subparts EF and GG.

 (9) A CARI NO_s allowances in a femiliar Program, No CARI Part, or an examplian under 40 CFR 80.105 and no provision of law shall be executed to limit the substant of the CARI NO_s allowance does not constitute a program (ed.).

 (7) A CARI NO_s allowances are does not constitute a program (ed.).

 (7) A CARI NO_s allowances are does not constitute a program (ed.).

 (7) A CARI NO_s allowances are does not constitute a program (ed.).

Expess Emissions Requirements.

- If a CARR NO₀ source omits NO₀ during any control period in excess of the CARR NO₀ emissions limitation, then:

 (1) The concept and operators of the source and each CARR NO₀ will at the source shall purposed the CARR NO₀ allowances required for detactation under 40 CFR 81 X-354(01) and gay any fine, resolve, or accessment or comply with any other remarks impaced, for the asmo-violations, under the Class Air Act or applicable state low; and

 (2) Eagle ten of much second emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subport AA, the Class Air Act, and applicable state losts.

Recordingening and Recorting Requirements.

- (1) Unless otherwise provided, the connex and operators of the CAIR NO₂ source and each CAIR NO₂ will all the operate shall less on site of the stateme such of the fathering deconvents for a partial of 8 years from the date the deconvent is resolute. This period may be unknown for exercise, at any firms before the end of 5 years, in willing by the DEP or the Administrator.

 (1) The centricate of each connected the father of DCFR EATS for the CAIR designated representative for the source and each CAIR NO₂ will at the exerce and of documents that demonstrate the first three centres and of documents that demonstrate the best of the designated representative, provided that the coefficate and demonstrate shall be retained as also at the other broad to the state of the coefficate of a new centificate of representative, and the coefficate and a new centificate of representative, in accordance with 50 CFR Post 58, Subject 194, or other than the state that 40 CFR Post 58, Subject 194, or other than the coefficate of the coefficate of the post, provided that is the union that 40 CFR Post 58, Subject 194, or other than the CAIR NO₂ annual Trading Program.

 (b) Capitar of all temments used to complete a CAIR Post from and any other exhibitation under the CAIR NO₂ Annual Trading Program.

 (c) The CAIR designated representation of a CAIR NO₃ course and each CAIR NO₃ annual Trading Program, including these under 40 CFR Post 58, Subject 194.

DEP Form No. 63-210.000(1)(b) - Form Effective: 3/18/05

Clean Air Interstate Rule Provisions

CRYSTAL RIVER POWER PLANT

Plant Hame (from STEP 1)

STEP 3,

Lishilly.

(1) Each CAR NO₂ source and each CAR NO₂ unit shall meet the requirements of the CAR NO₂ Annual Trading Program.
(2) Any provision of the CAR NO₂ Annual Trading Program that applies to a CAR NO₂ course or the CAR designated representative of a CAR NO₂ source or the CAR designated representative of a CAR NO₂ units at the source.
(3) Any provision of the CAR NO₂ annual Trading Program that applies to a CAR NO₂ unit or the CAR designated representative of a CAR NO₂ unit shall also equit to the owners and operators of such unit.

Effect on Other Authorities

f the CAR NO_K Assual Trading Program, a CAIR Part, or an assumption under 40 CPR 98.105 shall be construed as a immers and operation, and the CAIR designated representative, of a CAIR NO_K source or CAIR NO_K with from compile of the applicable, approved State implementation Plans, a theology endocratic permit, or the Capan Air Act.

CAIR SO, TRADING PROGRAM

CAIR Part Requirements.

- (1) The CARR designated representative of each CARR SC, source and each CARR SC, unit at the source shall.
 (3) Submit to the DEP a complete and certified CARR Post term under 40 CFR 96.222 and Rule 63-286.476, F.A.C., in accordance with the destificat specified in Rule 63-216.430, F.A.C.; and
 (3) Placetruct;
 (2) The current and operators of each CARR SC, source and each CARR SC, unit at the source shall have a CARR Post included in the Title V operating permit leasured by the DEP under 40 CFR Post 98, Subgest CCC, for the source and operate the source and each CARR past.

Monitorino, Reporting, and Recordisectino Requirements.

numers and operators, and the CAR designated representative, of each CAR SO₂ source and each SO₂ CAR unit at the source shall dit the mentioning, reporting, and recombinaging requirements of 40 CFR Part 95 Subport HHH, and Rule 52-296-670, F.A.C. unbelieve measurements recorded and reported in accordance with 40 CFR Part 95, Subport HHH, shall be used to determine as by each CAR SO₂ source with the fallowing CAR SO₂ Embalon Requirements.

SO₂ Emission Requirements.

- (1) As of the elevance transfer deadline for a control parted, the owners and operators of each CAR SQ₂ course and each CAR SQ₂ unit at the source shall had, in the source's compliance account, a tomage equivalent in CAR SQ₂ allowances evaluable for compliance deadleters. The easter passed, as determined in accordance with 40 CFR B.SE4(s) and (3), not less than the tone of test of deadleters the control pasted from all CAR SQ₂ with at the source, as determined in accordance with 40 CFR Part SA, subpart 1991.

 (2) A CAR SQ, with shall be relighed to the requirements under passages in 1) of the SAMP Deadlet Entered Registers and all the substances of the source of the sourc

- posted frequents.

 (3) A CARR SQ, altournous shall not be deducted, for compliance with the requirements under perspraph (1) of the SQ, Emission Requirements, for a eacher perside in a calendar year before the year for which the CARR SQ, altournous was allocated.

 (4) CARR SQ, altournous lead to hald in, deducted from, or transferred into or among CARR SQ, Altournous Tracking System accounts in attendance with 40 CFR PM 18, Stagesto FFF and GGG.

 (5) A CARR SQ, altournous in a limited authorization to emit suffer decide in accordance with the CARR SQ, Trading Program. No provision of the CARR SQ, trading Program, but CARR SQ, altournous does not consolitate or limit such authorization.

 (5) A CARR SQ, altournous does not consolitate a properly right.

 (7) Upon reconstaint by the Administration under 40 CFR Port SB, Subpair PFF or GGG, every allocation, transfer, or deduction of a CARR SQ, allournous to or from a CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's compliance account is incorporated automatically in any CARR Part of the seuros that includes the CARR SQ, unit's carried automatically in any CARR Part of the seuros that includes the CARR SQ, unit's carried automatically in any CARR Part of the seuros that includes th

Excess Emissions Requirements.

- If a CAIR SO₂ source entite SO₃ during any control period in excess of the CAIR SO₂ emissions limitation, then:

 (1) The evenes and operators of the source and each CAIR SO₂ unit at the source shall eureador the CAIR SO₂ at despetion under 40 CFR 98.254(6)(1) and pay any line, penalty, or excessment or comply with any other remedy in vibilations, under the Chen Air Act or applicable state box, and

 (2) Each ten of each excess emissions and each day of such central period shell constitute a separate violation of 4 the Clean Air Act, and applicable state law.

DEP Form No. 82-210.800(1)(b) - Form Effective: 3/10/06

SECTION V. CAIR PART.

Clean Air Interstate Rule Provisions

STEP 3,

CRYSTAL RIVER POWER PLANT

Plant Hame (from STEP 1)

Recordingation and Recording Regularments.

(1) Unless otherwise provided, the centers and operators of the CART SO, plants and each CART SO, until at the source shall leap on othe at the source seath of the following description for a point of 5 years from the date the description is oracled. This period may be extended for cause, at any time before the end of 5 years, in untiling by the Department or the Administrator.
(2) The extended of representation under 60 CFR SO, with at the cart description approximation for the cart SO, with at the source and all decorateds that the cart description of the cart decorated in the cart of the cart decorated in the cart decorated in a second or other cart decorated in the cart decorated in a second decorated in the cart decorated in a second or other cart decorated in a second or repaired under the CART SO, Trading Program.

(B) Capies of all decements used in complete a CAIR Past form and any other submission under the CAIR SQ, Youling Program.

(9) Capies of all decements used in complete a CAIR Past form and any other submission under the CAIR SQ, Youling Program.

(2) The CAIR designated representative of a CAIR SQ, throate and each CAIR SQ, unit at the severe shall extent the reports required un CAIR SQ, Truting Program, including these under 40 CFR Past SI, Subpast 18-91.

(1) Each CAR SO, opens and each CAR SO, will stell must be replacements of the CAR SO, trading Program.
(2) Any provision of the CAR SO, Trading Program that applies to a CAR SO, assures or the CAR designated representative of a CAR SO, course on the class copy to the convers and operators of each season and of the CAR SO, while after season will not the course of the CAR SO, and while after season and other seasons and other seasons and other seasons and other seasons are class as the CAR designated representative of a CAR SO, unit or the CAR designated representative of a CAR SO, unit of the course and operation of each will.

Effect on Other Authorities.

No provision of the CAIR 2O, Treding Program, a CAIR Part, or an exemption under 40 CFR 95.205 shall be construed as exempting or excluding the exempt and operation, and the CAIR designated expresentation, of a CAIR 3O, source or CAIR 3O, soll term complicates with any other provision of the applicability, approved Statis Implementation Flora, a labeling evolutional pennit, or this CAIR 3O, and Ar Act.

CAIR NO. OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CMR designated representative of each CAR NO₄ Oppine Season assets and each CAR NO₅ Chaine Season unit at the source shall (8) Subset to the DSP a complete and certified CAR Part form under 40 CPR 94.322 and Rule 93-324,470, F.A.C., in accordance with the desifiers specified in Rule 95-213.420, F.A.C.; and (9) [Reserved].

(2) The desiration and operation of each CAR NO₅ Cleane Season source regulated to have a 116-V operating points or air construction points, and each CAR NO₅ Cleane Season with regulated to have a 116-V operating points or air construction points of the season shall have a CAR Part NO₅ Cleane Season with regulated to have a Title V operating point or air construction point of the season and episted to occurs and the unit in completion to the NO₅ Cleane Season and episted the occurs and the unit in completion with each CAR Part.

Monitoring, Reporting, and Recordinggoing Requirements.

(1) The consens and operation, and the CAPT designated representative, of each CART NO₄. Cleans Season situres and each CAPT NO₄ Cleans Season situres and each CAPT NO₄ Cleans Season situres are supported to the season siture of a CPPT Part SE, Sulpart H+9+4, and Rest SE-381-1479, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CPPT Part SE, Sulpart H+9+94, shall be used to determine emissions of the CAPT NO₄ Cleans Season source with 40 CPPT Part SE, Sulpart H+9+94, shall be used to determine emissions of the CAPT NO₄ Cleans Season source with 40 CPPT Part SE, Sulpart H+9+94, shall be used to determine emissions of the CAPT NO₄ Cleans Season source with 40 CPPT Part SE, Sulpart H+9+94, shall be used to determine

NO. Ozone Sesson Emission Requirements.

(1) As of the elevance treater decides for a central partial, the conces and approximate assets CAST NO₁. Claims Season source and cent CAST NO₂, Claims Season will at the course shall held, in the source's compliance consult, CAST NO₂, Claims Season allowances available for compliance deducations for the centre of partial from all CAST NO₂. Claims Season allowances are detailed for partial from all CAST NO₂. Claims Season will not be the storm, as determined to season and with 40 CFF Part LES Subject NOYEP.

(2) A CAST NO₂, Claims Season will still be exhipate to the imprisonments under paragraph (1) of the NO₂. Claims Season will still be exhipated to the imprisonments under an order of the CFF 86.370(\$\text{k}\$1),(2), or (2) and for each central partial thereafter.

(3) A CAST NO₂, Claims Season advances what inst be deviced, for compliance with the imprisonments under 40 CFF 86.370(\$\text{k}\$1),(2), or (3) and 50 centre of the NO₂. Claims Season advances what inst be deviced, for compliance with the CAST NO₂ Claims Season allowance was allowances.

obsessed.

(c) CARN MO, Commo Besseon efferences shall be half in, desirated from, or transformed into or among CARN MO, Commo Besseon Allementes.

Treating Byellum estructus in assortance with 40 CAR Part bit, dusparts FFFF and GROSS.

(g) A CARN MO, Commo Besseon attenues to a binded architecturate to gent one to ret MO, in accordance with the CARN MO, Commo Besseon Training Program. He provides of the CARN MO, Commo Besseon Training Program, the provides of the CARN MO, Commo Besseon Training Program, the CARN Pot, or an assimption under 40 CARN MO, Commo Besseon attenues the tent of the Label States or the United States to training or an assimption under 40 CARN MO, Commo Besseon alternate down and control and property digit.

(7) Upon reservation by the Administrator under 40 CARN MO, Commo Besseon unit's complaince account is incorporated extension for a CARN MO, Commo Besseon the firm a CARN MO, Commo Besseon that includes the CARN MO, Commo Besseon unit's complaince account is incorporated extensionally in any CARN Plant of the source that includes the CARN MO, Commo Besseon unit.

DEP Form No. 42-210.800(1)(b) - Form Effective: 3/18/08

24-AV enewal

Clean Air Interstate Rule Provisions

, i			
	CRYSTAL RIVER POWER PLANT		
	Plant Name (from STEP 1)		
	Extess Emissions Requirements.		
STEP 3, Continued	If a CAIR NO ₀ Dame Season course ends NO ₁ during any control partied in crosses of the CAIR NO ₂ Casse Season emissions limitation, then: (1) The demant and operation of the source and each CAIR NO ₂ Capte Season wit at the source shall currently the CAIR NO ₂ Capte Season differences regarded for defeatedes under 40 CFR SEASON(S) and pay less, penalty, or assessment or camply with any other remody interest, for the source violations, under the Close Air Act or applicable state law; and (2) Seath ten of source courses contained and only of such control partied shall constitute a expensive violation of 40 CFR Part 66, Subpart AAAA, the Clase Air Act, and applicable state law.		
	Recording and Recording Reculrements.		
	(1) Unless otherwise previded, the content and operators of status shall heap on eith at the source each of the following to extended for causes, of any time below the end of 5 (i). The confiltrate of representation under 46 CFR 68.31 Sentant with at the neuron shall be returned that demands on filtred and dearments shall be returned on the at the or entiretains of a new confiltrate of representation under 40 (i) (ii) All containers receiving information, in assertioner CFR Post 68, Subgest 1949-11, purposed for a 3-year period 6 (ii) (iii) (iii) and iiii) (iiii) (iiiii) (iiii) (iiii) (iiii) (iiii) (iiii) (iiii) (iiii) (iiii) (iiiii) (iiiii) (iiiii) (iiiii) (iiiii) (iiiiii) (iiiiii) (iiiiii) (iiiiii) (iiiiiii) (iiiiiii) (iiiiiii) (iiiiiiii	on beyond such S-year period until 2 R 05.113 champing the CARR design to 40 CFR PHI 05. Subpart 169914. recordingsing, the S-year parted the recordingsing, the S-year parted the recordingsing, the S-year parted the recordingsing, the S-year parted to the control of the CARR NO. Comme Season To of the CARR NO. Comme Season To the Season mounts and eath CARR NO.	on the control of the
	Linksty.		
	(1) Both CAR HO, Come Sesson course and each CAR Trading Program. (2) Any produin of the CAR HO, Come Sesson Trading expressions of a CAR HO, Come Sesson course shall be seen out to at the source. (8) Any produin of the CAR HO, Come Sesson unit shall dispressions of a CAR HO, Come Sesson unit shall dispressions.	regreen that applies to a CAIR $HO_{\rm H}$ (σ apply to the decrease and operators	Canna Sesson source or the CAR designated and each source and of the CAR HC ₆ Canno
	Effect on Other Authorities.		
	No provision of the CARR NO ₂ Cleane Section Treating Prog mentingting or enabling the customs and operation, and the Cleane Section until team compliance with any other provision points, or the Clean Air Act.	n, a CAR Port, or on exemption wh uR designated representative, of a (of the applicable, approved State in	der 40 CFR 98.306 shell be construed as CAIR NO, Quere Section course or CAIR NO, plumentation Plan, a federally entercentia
STEP 4	Cortification (for designated representative	or alternate declarated mu	omenstative each?
Read the contilection statement; provide name, title, owner	I am an implication to make the make the property of the control o		· · · · · · · · · · · · · · · · · · ·
company name, phone, and o-mell address; sign, and	Name: Patricia Q. West	Title: Manage Florida	er, Environmental Services -
dela.	Company Owner Name FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC.		
	Phone: 727.820.5739 E-mail Address: patricia.west@pgnmail.com		
	Patricia & Lie	+	Des 4/23/09

Progress Energy Florida, Inc. Crystal River Power Plant

SECTION VI. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 9, 1997).

Appendix CAM, Compliance Assurance Monitoring Plan.

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

Appendix NSPS, Subpart A - General Provisions.

Appendix NSPS, Subpart D – Standards of Performance for Fossil Fuel Fired Steam Generators for which Construction is Commenced After August 17, 1971.

Appendix NSPS, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Appendix NSPS, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Appendix NSPS, Subpart Y - Standards of Performance for Coal Preparation Plants.

Appendix NESHAP, Subpart A – General Provisions.

Appendix NESHAP, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

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