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BUREAU OF AIR REGULATION

THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an
Application for Permit by:

Florida Power Corporation,
Crystal River Plant
_______________________________________/

OGC CASE NO. 97-1641

Revised DRAFT Permit No.: 0170004-004-AV
Citrus County, Florida

NOTICE OF WITHDRAWAL OF EXTENSION OF TIME

The Florida Power Corporation (FPC), by and through undersigned counsel, hereby withdraws its Request for Extension of Time to file a petition for formal administrative proceedings in accordance with Chapter 120, Florida Statutes. FPC filed its last Request for Extension of Time until October 1, 1999, in response to the "Intent to Issue Title V Air Operation Permit" (**REVISED** Draft Permit No.0170004-004-AV) for the Crystal River Plant located in Citrus County, Florida, to negotiate certain changes in the Revised Draft Title V permit with the Department of Environmental Protection (Department). Following discussions with Department representatives, FPC and the Department came to an agreement on the issues involved in the above-referenced Revised Draft Title V permit, as reflected in the attached preliminary proposed Title V permit. Conditioned upon the Department's issuance of the Proposed Title V permit in accordance with our agreement, FPC hereby withdraws its Request for Extension of Time.

Respectfully submitted this 16 day of September, 1999.

HOPPING GREEN SAMS & SMITH, P.A.

Robert A. Manning

Robert A. Manning
Fla. Bar No. 0035173
123 South Calhoun Street
Post Office Box 6526
Tallahassee, FL 32314
(850) 222-7500

Attorney for Florida Power Corporation

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S. Mail on this 16 day of September, 1999.

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

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

Doug Beason
Office of General Counsel
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2600

Robert A. Manning
Attorney

129339

September 16, 1999

W. Jeffery Pardue
Director, Environmental Services Department
Florida Power Corporation
263 13th Avenue South
St. Petersburg, Florida 33701-5511

Re: PROPOSED Title V Permit No.: 0170004-004-AV
Crystal River Plant

Dear Mr. Pardue:

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

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

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

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

Sincerely,

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

CHF/s

Enclosures

copy furnished to:
Kennard Kosky, PE, Golder Associates, Inc.
J. Michael Kennedy, Florida Power Corporation
Bill Thomas, PE, FDEP, SWD
Mr. Gregg Worley, USEPA, Region 4 (INTERNET E-mail Memorandum)

Ms. Elizabeth Bartlett, USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Florida Power Corporation for the Crystal River Plant located west of U.S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County was clerked on July 23, 1999. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Citrus County Chronicle on August 1, 1999. The Revised DRAFT Title V Air Operation Permit was available for public inspection at the Department's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on August 13, 1999.

II. Public Comment(s).

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

A. Letter from Mr. J. Michael Kennedy dated July 30, 1999, and received on August 2, 1999.

1R: The Department agrees with the comment and the following change is made to the "Statement of Basis":

> **From:** FFSG Units 1 and 2 are pulverized coal dry bottom boilers, tangentially-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Buell Manufacturing Company, Inc. These emissions units are regulated under Acid Rain, Phase I and II; Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; and, Power Plant Siting Certification PA 77-09 conditions. FFSG Unit 1 began commercial operation in 1966. FFSG Unit 2 began commercial operation in 1969. FFSG Unit 1 is a Phase II NO_X unit and FFSG Unit 2 is a Phase I/II Early election NO_X unit. The emissions units are permitted to combust bituminous coal; a bituminous coal and bituminous coal briquette mixture; or a bituminous coal and petcoke blend. Distillate fuel oil may be burned as a startup fuel. The permittee has agreed to the use of CEMs for the purpose of periodic monitoring and currently demonstrates compliance with the sulfur dioxide standards through daily fuel analyses.
>
> ....

FFSG Units 4 and 5 are pulverized coal dry bottom boilers, wall-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Combustion Engineering. These emissions units are regulated under Acid Rain, Phase I and II; Rule 62-210.300, F.A.C., Permits Required and are subject to 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971; and, Power Plant Siting Certification PA 77-09 conditions. FFSG Unit 4 began commercial operation in 1982. FFSG Unit 5 began commercial operation in 1984. FFSG Units 4 and 5 are Phase I/II Early election NO_X units. The emissions units are permitted to combust bituminous coal; a bituminous coal and bituminous coal briquette mixture; and used oil, with number 2 fuel oil as a startup fuel and natural gas as a startup and low-load flame stabilization fuel. The permittee has agreed to the use of CEMs for the purpose of periodic monitoring and currently demonstrates compliance with the sulfur dioxide standards through daily fuel analyses.

To: FFSG Units 1 and 2 are pulverized coal dry bottom boilers, tangentially-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Buell Manufacturing Company, Inc. These emissions units are regulated under Acid Rain, Phase I and II; Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; and, Power Plant Siting Certification PA 77-09 conditions. FFSG Unit 1 began commercial operation in 1966. FFSG Unit 2 began commercial operation in 1969. FFSG Unit 1 is a Phase II NO_X unit and FFSG Unit 2 is a Phase I/II Early election NO_X unit. The emissions units are permitted to combust bituminous coal; a bituminous coal and bituminous coal briquette mixture; or a bituminous coal and petcoke blend. Distillate fuel oil may be burned as a startup fuel. The permittee has agreed to the use of CEMs (opacity, SO_2 and NO_X) for the purpose of periodic monitoring and currently demonstrates compliance with the sulfur dioxide standards through daily fuel analyses.

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The Department agrees with the comments and the following changes are made to the permit:

From:

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

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

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

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

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition, for boiler cleaning and load changes, at units which have installed and are operating continuous opacity monitors.
[Rule 62-210.700(3), F.A.C., Note: these units have operational continuous opacity monitors.]

A.8. Sulfur Dioxide.

(a) When burning coal or coal blended with petcoke, sulfur dioxide emissions shall not exceed 2.1 pounds per million Btu heat input.
(b) The maximum sulfur dioxide emissions from the coal/briquette mixture shipment, averaged on an annual basis, shall not exceed the following:

Emissions Unit No.	Emissions Unit Description	Average Sulfur Dioxide Limit, in Pounds Per Million Btu, Heat Input
001	FFSG, Unit 1	1.67
002	FFSG, Unit 2	1.67

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

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

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

B.5.a. Standard For Sulfur Dioxide.

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
(1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel.
(2) 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel.
....

B.6. Pursuant to 40 CFR 60.44 Standard For Nitrogen Oxides.
(a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO_2 in excess of:
(1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
(2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel.
(3) 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel.
....

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

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

Notes:

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

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

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

H.2. Visible Emissions. The owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [PPSC PA 77-09 (coal facilities associated with Units 1, 2, 4 and 5)]

To:

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

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

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

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

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition, for boiler cleaning and load changes, at units which have installed and are operating continuous opacity monitors.
[Rule 62-210.700(3), F.A.C., Note: these units have operational continuous opacity monitors.]

A.8. Sulfur Dioxide.

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

(b) The maximum sulfur dioxide emissions from the coal/briquette mixture shipment, averaged on an annual basis, shall not exceed the following:

Emissions Unit No.	Emissions Unit Description	Average Sulfur Dioxide Limit, in Pounds Per Million Btu, Heat Input
001	FFSG, Unit 1	1.67
002	FFSG, Unit 2	1.67

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

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

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:

(1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.

(2) Exhibit greater than 20 percent opacity, six minute average, except for one six-minute period per hour of not more than 27 percent opacity.

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

B.5.a. Standard For Sulfur Dioxide.

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:

(1) 340 nanograms per joule heat input (0.80 lb per million Btu), 24-hour average, derived from liquid fossil fuel.

(2) 520 nanograms per joule heat input (1.2 lb per million Btu), 24-hour average, derived from solid fossil fuel.

....

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

(a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO_2 in excess of:

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

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

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

....

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

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

Notes:

a Emission limits based on a BACT Determination proposed 1/26/79, ordered 2/5/79. BACT for emissions units 006 and 007 included a VE limit of 5% opacity, six minute average.

b Emission limits based on a BACT Determination ordered 8/16/79.

c The tons per year limits for emissions units 009 and 010 have been corrected to one decimal place.

[AC 09-25791]

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

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

H.2. Visible Emissions. The owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater, six minute average.
[PPSC PA 77-09 (coal facilities associated with Units 1, 2, 4 and 5)]

2R: The Department agrees with the comment and the following change is made:

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

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

3R: The Department agrees with the comment and the following change is made:

From:

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

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

To:

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

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

4R: The Department has addressed the allowed excess emissions of opacity and particulate matter in Specific Conditions A.5. and A.7. No changes are required.

B. Document(s) on file with the permitting authority:
-Letter received August 2, 1999, from Mr. J. Michael Kennedy

III. Risk Management Plan

Since the Crystal River Plant now has a completed Risk Management Plan, the following changes are made:

Add:
Documents on file with USEPA
Risk Management Plan submitted to the RMP Reporting Center on 06/21/99 (received date).

The following change is made to **Section II. Facility-wide Conditions.**

From: 4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
b. certification forms and/or RMPs according to the promulgated rule schedule.
[40 CFR 68]

To: 4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. As required by Section 112(r)(7)(B)(iii) of the CAAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agecy under Section 112(r)(6) of the CAAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

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

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

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

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

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

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

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

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

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

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

III. Conclusion.

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

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

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

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

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

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

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

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

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

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Permittee:
Florida Power Corporation
263 13th Avenue South
St. Petersburg, FL 33701-5511

PROPOSED Permit No.: 0170004-004-AV
Facility ID No.: 0170004
SIC Nos.: 49, 4911
Project: Initial Title V Air Operation Permit

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

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

Referenced attachments made a part of this permit:
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-3, Title V Conditions (version dated 04/30/99)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Appendix P, Sensitive Paper Sampling Locations and Apparatus
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
Figure 1 - Summary Report-Gaseous And Opacity Excess Emission And Monitoring System Performance Report (version dated 7/96)
Phase II Acid Rain Application/Compliance Plan received 12/22/95
Phase I Acid Rain permit dated 3/27/97
Alternate Sampling Procedure: ASP Number 97-B-01
Order Granting Petition for Reduced Frequency of Particulate Testing, OGC Case No. 86-1576, Order dated December 12, 1986 (Emissions Unit 001)
Best Management Plan, KBN, November 1990
Figure A, Ambient Air Monitoring Locations, Crystal River, Florida

Effective Date: January 1, 2000
Renewal Application Due Date: July 5, 2004
Expiration Date: December 31, 2004

Howard L. Rhodes, Director
Division of Air Resources Management

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of four coal-fired fossil fuel steam generating (FFSG) units with electrostatic precipitators; two natural draft cooling towers for FFSG Units 4 and 5; helper mechanical cooling towers for FFSG Units 1, 2 and Nuclear Unit 3; coal-, fly ash-, and bottom ash-handling facilities, and relocatable diesel fired generator(s). The nuclear unit (Unit 3) is not considered part of this permit, although certain emissions units associated with Unit 3 are included in this permit.

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

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

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

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

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

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

Subsection C. Relevant Documents.

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

<u>These documents are provided to the permittee for information purposes only:</u>
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements

<u>Documents on file with USEPA</u>
Risk Management Plan submitted to the RMP Reporting Center on 06/21/99 (received date).

<u>These documents are on file with the permitting authority:</u>
Initial Title V Permit Application received June 14, 1996
BACT Determination dated 8/29/90 (Cooling Tower Drift Emission Rate)
BACT Determinations ordered 2/5/79 (proposed 1/26/79) and 8/16/79 (Fly Ash Transfer)
Revision to Permit Application received April 17, 1998
Letter received November 9, 1998, from Mr. Scott Osbourn.
Letter received August 2, 1999, from Mr. J. Michael Kennedy

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not Federally Enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1. & 4, F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. As required by Section 112(r)(7)(B)(iii) of the CAAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agecy under Section 112(r)(6) of the CAAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

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

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

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

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

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

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

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

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

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

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

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

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

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

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

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

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

9. When appropriate any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which defines day one.
[Rule 62-213.440, F.A.C.]

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

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

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

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

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year.
[Rule 62-214.420(11), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

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

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

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

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

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

Essential Potential to Emit (PTE) Parameters

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

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

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

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

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **L11**.
[Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation. Fuels. The only fuels allowed to be burned by this permit are: bituminous coal; a bituminous coal and bituminous coal briquette mixture, a five percent (plus or minus two percent) blend of petroleum coke with coal by weight, and distillate fuel oil for startup.. These emissions units may also burn used oil in accordance with other conditions of this permit (see **Subsection K**). Emissions units 001 and 002 may also burn oily flyash in accordance with specific condition **A.16** of this permit.
[Rule 62-213.410, F.A.C.; 0170004-002-AO, 0170004-005-AO, 0170004-003-AC and 0170004-006-AC]

Emission Limitations and Standards

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

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

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

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

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition, for boiler cleaning and load changes, at units which have installed and are operating continuous opacity monitors.
[Rule 62-210.700(3), F.A.C., Note: these units have operational continuous opacity monitors.]

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

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

A.8. Sulfur Dioxide.
(d) When burning coal or coal blended with petcoke, sulfur dioxide emissions shall not exceed 2.1 pounds per million Btu heat input, 24-hour average.
(b) The maximum sulfur dioxide emissions from the coal/briquette mixture shipment, averaged on an annual basis, shall not exceed the following:

Emissions Unit No.	Emissions Unit Description	Average Sulfur Dioxide Limit, in Pounds Per Million Btu, Heat Input
001	FFSG, Unit 1	1.67
002	FFSG, Unit 2	1.67

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

{Permitting note: The sulfur dioxide limit of the coal and coal briquette mixture is based on an annual average sulfur content of 1.05%, by weight, and an average heat content of 25.17 million Btu per ton of coal.}

Test Methods and Procedures

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

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

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

A.12. Sulfur Dioxide. The owner or operator may demonstrate compliance with the sulfur dioxide limitation using fuel sampling and analysis. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **A.11** and **A.13**.

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

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

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

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

c. Utilize the information in a. and b., above, to calculate the SO_2 emission rate to ensure compliance at all times.

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

Monitoring of Operations

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

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

Oily Flyash

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

a. Only flyash from Bartow Unit 1 may be burned in these emissions units. Once the accumulated backlog of Bartow Unit 1 flyash (estimated at approximately 13,000 tons) is burned, only the additional flyash generated at Bartow Unit 1 shall be burned in these emissions units.
b. The maximum flyash blend rate shall not exceed 2% of the total boiler feed on a weight basis.
c. The owner or operator shall make and maintain the following records for each day that flyash is burned in the boiler:

1. Date and Unit number;
2. Time period of flyash burning and start and end times;
3. Total quantity of flyash burned in tons per day;
4. Maximum flyash blend rate during period of flyash burn (percent flyash in total emissions unit fuel feed on a weight basis).

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

Common Conditions

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

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

Record Keeping and Reporting Requirements:

A.19. COMS for Periodic Monitoring. The owner or operator is required to install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring.
[Rule 62-213.440, F.A.C.]

Subsection B. This section addresses the following emissions unit.

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

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

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

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

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

Essential Potential to Emit (PTE) Parameters

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

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

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

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

measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}
B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **L11.**
[Rule 62-297.310(2), F.A.C.]

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

Emission Limitations and Standards

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

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

B.5.a. Standard For Sulfur Dioxide.

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

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

where:
PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,
y is the percentage of total heat input derived from liquid fossil fuel, and
z is the percentage of total heat input derived from solid fossil fuel.
(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.
[40 CFR 60.43(a), (b) and (c); and, PPSC PA 77-09]

B.5.b. Standard For Sulfur Dioxide. The maximum sulfur dioxide emissions from the coal/briquette mixture shipment, averaged on an annual basis, shall not exceed the following:{See specific conditions **B.10.** and **B.11.**}

Emissions Unit No.	Emissions Unit Description	Average Sulfur Dioxide Limit, in Pounds Per Million Btu, Heat Input
004	FFSG, Unit 4	1.09
003	FFSG, Unit 5	1.09

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

{Permitting note: The sulfur dioxide limit of the coal and coal briquette mixture is based on an annual average sulfur content of 0.68%, by weight, and an average heat content of 25.17 million Btu per ton of coal.}

B.6. Pursuant to 40 CFR 60.44 Standard For Nitrogen Oxides.
(a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO_2 in excess of:
(1) 86 nanograms per joule heat input (0.20 lb per million Btu), 30-day rolling average, derived from gaseous fossil fuel.
(2) 129 nanograms per joule heat input (0.30 lb per million Btu), 30-day rolling average, derived from liquid fossil fuel.
(3) 300 nanograms per joule heat input (0.70 lb per million Btu), 30-day rolling average, derived from solid fossil fuel.
(b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

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

where:
PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels fired;
x = is the percentage of total heat input derived from gaseous fossil fuel;
y = is the percentage of total heat input derived from liquid fossil fuel; and,
z = is the percentage of total heat input derived from solid fossil fuel.
[40 CFR 60.44(a)(2) and (3), and (b); and, PPSC PA 77-09]

Test Methods and Procedures

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

(a) When conducting emissions tests, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d).
(b) The owner or operator shall determine compliance with the particulate matter, SO_2, and NO_x standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
(1) The emission rate (E) of particulate matter, SO_2, or NO_x shall be computed for each run using the following equation:

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

E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
% O_2 = oxygen concentration, percent dry basis.
F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particulate matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.
(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (%O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
(iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.
(3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
(4) Method 6 shall be used to determine the SO_2 concentration.
(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (%O_2). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
(5) Method 7 shall be used to determine the NO_x concentration.
(i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
(ii) For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (%O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.
(iii) The NO_x emission rate shall be computed for each pair of NO_x and O_2 samples. The NO_x emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.
(c) When combinations of fossil fuels are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.43(b) and 60.44(b)) shall determine the percentage (x, y, or z) of the total heat input derived from each type of fuel as follows:
(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.
(2) ASTM Methods D 2015-77 (solid fuels), D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.
(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.
(d) The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
(1) The emission rate (E) of particulate matter, SO_2 and NO_x may be determined by using the Fc factor, provided that the following procedure is used:
(i) The emission rate (E) shall be computed using the following equation:

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

where:
E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
$\%CO_2$ = carbon dioxide concentration, percent dry basis.
F_c = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:

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

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

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

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

(3) Particulate matter and SO_2 may be determined simultaneously with the Method 5 train provided that the following changes are made:

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

(ii) All applicable procedures in Method 8 for the determination of SO_2 (including moisture) are used:

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO_2 emission rate, under the conditions in 40 CFR 60.46(d)(1).

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration ($\%O_2$) for the emission rate correction factor.

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

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

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

B.9. Annual RATA Tests May Substitute for Annual NOx and SO_2 Tests. Annual RATA tests performed for nitrogen oxides and sulfur dioxide may be substituted for the annual compliance tests for these pollutants. To substitute for the annual compliance tests, the owner or operator must notify the Department of the RATA tests and the results must be submitted as the compliance tests, in accordance with the requirements of specific conditions I.6.(a)9. and I.15 of this permit. The requirements of specific conditions I.9 and I.12.(a)1. shall not apply to these tests. The test runs shall be consecutively completed in a manner that fulfills the test length requirements of the EPA test methods.

[Request of applicant, February 11, 1998]

B.10. The permittee shall demonstrate compliance with the sulfur dioxide limit in specific condition **B.5.b.** by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **B.5.b.** and **B.11.**
[Rule 62-213.440, F.A.C.; and, 0170004-006-AC]

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

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

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

c. Utilize the information in a. and b., above, to calculate the SO_2 emission rate to ensure compliance at all times.

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

Monitoring of Operations

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

B.13. Annual Tests Required - PM, VE, SO_2 and NOx. Except as provided in specific conditions **I.6** and **I.7** of this permit, emission testing for particulate matter emissions, visible emissions, sulfur dioxide and nitrogen oxides shall be performed annually.
[Rules 62-4.070(3), 62-213.440, and 62-297.310(7), F.A.C.]

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

CMS for Opacity, SO_2, NOx, and CO_2 are Required.

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

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

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

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

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

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

{1}Not applicable.

where:
x = the fraction of total heat input derived from gaseous fossil fuel, and
y = the fraction of total heat input derived from liquid fossil fuel, and
z = the fraction of total heat input derived from solid fossil fuel.

(4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
(e) For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):
(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$E = CF[20.9/(20.9\text{-percent } O_2)]$
where:
E, C, F, and % O_2 are determined under 40 CFR 60.45(f).

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

$E = CF_c\ [100/\text{percent } CO_2]$
where:
E, C, F_c and %CO_2 are determined under 40 CFR 60.45(f).
(f) The values used in the equations under 40 CFR 60.45(e) (1) and (2) are derived as follows:
(1) E = pollutant emissions, ng/J (lb/million Btu).
(2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
(3) % O_2, %CO_2 = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
(4) F, F_c = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:
(ii) For subbituminous and bituminous coal as classified according to ASTM D388-77 (incorporated by reference-see 40 CFR 60.17), $F = 2.637 \times 10^{-7}$ dscm/J (9,820 dscf/million Btu) and $F_c = 0.486 \times 10^{-7}$ scm CO_2 /J (1,810 scf CO_2 /million Btu).

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

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

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

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

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

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

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

$$F_c = \frac{321\text{x}10^{3}\ (\%C)}{\text{GCV (English units)}}$$

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

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

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

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

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, etc.)
F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.
n = the number of fuels being burned in combination.
[40 CFR 60.45(a), (b), (c), (e) and (f); PPSC PA 77-09]

B.15. Excess Emission Reports.
(g) Excess emission reports shall be submitted to the Department for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions that shall be reported are defined as follows:
(1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
(2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.
(3) Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.
[40 CFR 60.45(g)]

Other NSPS Subpart D Conditions

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

Ambient Air Monitoring

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

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

Common Conditions

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

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

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

Subsection C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
006	Fly ash transfer (Source 1) from Fossil Fuel Steam Generator (FFSG) Unit 1.
008	Fly ash storage silo (Source 3) for FFSG Units 1 and 2.
009	Fly ash transfer (Source 4) from FFSG Unit 2.
010	Fly ash transfer (Source 5) from FFSG Unit 2.

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

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

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

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

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

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

Essential Potential to Emit (PTE) Parameters

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

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

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

Emission Limitations and Standards

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

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

Notes:

a Emission limits based on a BACT Determination proposed 1/26/79, ordered 2/5/79. BACT for emissions units 006 and 007 included a VE limit of 5% opacity, six minute average.

b Emission limits based on a BACT Determination ordered 8/16/79.

c The tons per year limits for emissions units 009 and 010 have been corrected to one decimal place.

[AC 09-25791]

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

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

Monitoring of Operations

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

Common Conditions

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

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
014	Bottom ash storage silo for FFSG Units 1 and 2, with associated vacuum blower exhausts and bin vent filter (total of three emission points).

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

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

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

Essential Potential to Emit (PTE) Parameters

***D.*1.** Permitted Capacity. The transfer rates shall not exceed 16 tons per hour (8 tons per hour from each FFSG unit).
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

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

D.3. Additional Reasonable Precautions for Control of Particulate Matter Emissions. The owner or operator shall take the following reasonable precautions to control emissions of particulate matter from transport of ash from emissions unit 014 for disposal or use. Ash for transport shall be wet via a pugmill before loading into open trucks, or dry ash shall be transferred to enclosed tanker trucks.
[Rule 62-4.070(3), F.A.C.; and, AC 09-235915]

Monitoring of Operations

D.4. Annual VE Tests Required. Each emission point of emissions unit 014 shall be tested for visible emissions annually using EPA Method 9. Each test shall be a minimum of thirty minutes in duration from each exhaust point, while transferring bottom ash and economizer ash from both FFSG Units 1 and 2 to the silo at the same time at 90-100% of design throughput rate of 8 TPH.
[Rules 62-4.070(3) and 62-296.320(4)(b)4, F.A.C.; AC 09-235915; and, AO 09-248541]

Common Conditions

D.5. This emissions unit is also subject to conditions **L1** through **L15**, except for **L3**, contained in **Subsection L Common Conditions.**

Subsection E. This section addresses the following emissions unit.

Facility ID No.	E. U. ID No.	Brief Description
7775047	-001	Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled.

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

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

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

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

<u>Essential Potential to Emit (PTE) Parameters</u>

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

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

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

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

<u>Emission Limitations and Standards</u>

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

Monitoring of Operations

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

Test Methods and Procedures

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

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

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

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

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

Record Keeping and Reporting Requirements

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

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

Source Obligation

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

E.15. Florida Power Corporation shall notify the Department's Southwest District Office, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following;

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

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

Common Conditions

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

Subsection F. This section addresses the following emissions unit.

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

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

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

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

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity. The seawater flow rate shall not exceed 735,000 gallons per minute for all cells combined.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

F.2. Hours of Operation. The operating hours for each cooling tower pump shall not exceed 4320 hours per year (12-month rolling total).
[Rule 62-210.200(PTE), F.A.C.; and, AC 09-162037 (PSD-FL-139)]

Emission Limitations and Standards

F.3. Cooling Tower Emission Limit. Emissions of particulate matter from each cooling tower cell shall not exceed 11.9 pounds per hour.
{Note: The emission limit is based on a BACT Determination setting the maximum drift emissions at 0.004%. Equivalent maximum emissions are 428 lb/hr and 925 tons per year total for all cells. PM_{10} emissions are estimated to be approximately 50% of the particulate matter emission rate.}
[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

F.4. Drift Eliminators. Drift eliminators shall be installed and maintained so that minimum bypass occurs. Regular maintenance shall be scheduled to ensure proper operation of the drift eliminators.
[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

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

Test Methods and Procedures

F.5. Emission Test Method. Test using EPA Method 5, from 40 CFR 60 Appendix A, except that a distilled water rinse shall be used in place of acetone, and the impinger catch shall be excluded from the emission calculations. Testing shall be conducted on one cell, selected by the Department, of each of the four towers while the towers are being operated at 90-100% of the seawater flow rate. The seawater flow rate shall be estimated using manufacturers certified pump curves or other method approved by the Department. The test report shall include the estimated seawater and air flow rates.
[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

Monitoring of Operations

F.6. Test Every Five Years. The owner or operator shall test for particulate emissions every five years, unless actual emissions exceed 80% of allowable, in which case compliance testing is required every 30 months until actual emissions are less than 80% of allowable.
[Rule 62-213.440 and 62-297.310(7), F.A.C.; AC 09-162037 (PSD-FL-139); and, AO 09-236827]

Record Keeping and Reporting Requirements

F.7. Pump Run Time Meters Required. Equip each cooling tower seawater pump with a run-hour meter and maintain records of run time for each pump based on run-hour meters for each calendar month.
[Rule 62-213.440, F.A.C.; and, AC 09-162037 (PSD-FL-139)]

Common Conditions

F.8. This emissions unit is also subject to conditions **L1** through **L15**, except for **L3**, **L7** and **L8**, contained in **Subsection L. Common Conditions.**

Subsection G. This section addresses the following emissions unit.

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

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

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

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

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The maximum seawater flow rate shall not exceed 331,000 gallons per minute per cooling tower.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

G.2. Cooling Tower Emission Limit. Emissions of particulate matter shall not exceed 175 lb/hr from each cooling tower.
{Note: The emission limit is based on a BACT Determination requiring control of drift emissions with drift eliminators. The modified PSD permit removed a limitation on drift rate, substituting an emissions limit in pounds per hour. PM emissions are assumed to be all PM_{10}.}
[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

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

Test Methods and Procedures

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

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

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

Monitoring of Operations

G.4. Test Every Five Years. The FFSG Unit 4 cooling tower shall be tested every five years from 1988 (the next required year from the effective date of this permit is 2003). The FFSG Unit 5 cooling tower shall be tested every five years from 1992 (the next required year from the effective date of this permit is 2002).
[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88, request of applicant]

G.5. Inspection. The drift eliminators of both towers shall be inspected from the concrete walkways not less than every three months by Florida Power Corporation staff or representatives to assure that the drift eliminators are clean and in good working order. Not less than annually, a complete inspection of the towers shall be conducted by a manufacturer of drift eliminators or by a consultant with recognized expertise in the field.
Certification that the drift eliminators are properly installed and in good working order shall be made at the time of submission of the reports noted below.
[Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

Record Keeping and Reporting Requirements

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

a. Within 30 days after all visual inspections of the drift eliminators.
b. Within 45 days after the compliance testing of either tower.

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

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

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

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

Common Conditions

G.8. This emissions unit is also subject to conditions L1 through L15, except for L3, L7 and L8, contained in Subsection I. Common Conditions.

Subsection H. This section addresses the following emissions unit.

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

Emissions unit 016 is material handling activities for coal-fired steam units. This emissions unit consists of the storage and transport of coal, fly ash and bottom ash for FFSG Units 1, 2, 4 and 5 and not addressed by other emissions units. Emissions are particulate matter and PM_{10} from these activities.

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

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

Emission Limitations and Standards

H.1. Pursuant to 40 CFR 60.252 Standards for Particulate Matter.
(c) The owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.
[40 CFR 60.252 (coal facilities associated with Units 4 and 5)]

H.2. Visible Emissions. The owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater, six minute average.
[PPSC PA 77-09 (coal facilities associated with Units 1, 2, 4 and 5)]

H.3. PM Control -- BMPs. The owner or operator shall control particulate emissions (PM and PM_{10}) through the practices described in the Best Management Plan authored by KBN, November 1990, and distributed to FPC staff November 21, 1990, by Mr. W. Jeffrey Pardue.
[AC 09-162037, PSD-FL-139 (for construction of helper cooling towers) specific condition 3]

Test Methods and Procedures

H.4. Visible Emissions. **(This condition applies to coal facilities associated with emissions units 004 and 003 – FFSG Units 4 and 5.)** Pursuant to 40 CFR 60.254 Test Methods and Procedures.
(2) EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
[40 CFR 60.254]

H.5. Visible Emissions. **(This condition applies to coal facilities associated with emissions units 001 and 002 – FFSG Units 1 and 2.)** VE Test Method. EPA Method 9 shall be used to determine opacity.
[Rules 62-4.070(3), 62-213.440 and 62-297.401, F.A.C.]

<u>Common Conditions</u>

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

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

Subsection I. Common Conditions.

E.U. ID No.	Brief Description
001	Fossil Fuel Steam Generator (FFSG), Unit 1
002	FFSG, Unit 2
004	FFSG, Unit 4
003	FFSG, Unit 5
006	Fly ash transfer (Source 1) from FFSG Unit 1
008	Fly ash storage silo (Source 3) for FFSG Units 1 and 2
009	Fly ash transfer (Source 4) from FFSG Unit 2
010	Fly ash transfer (Source 5) from FFSG Unit 2
014	Bottom ash storage silo for FFSG Units 1 and 2, with associated vacuum blower exhausts and bin vent filter (total of three emission points)
7775047, 001	Three relocatable diesel fired generators, rated at 0.82 MW, 8.58 MMBtu/hr
013	Cooling towers for FFSG Units 1, 2, and 3, used to reduce plant discharge water temperature
015	Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature
016	Material handling activities for coal-fired steam units

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

Essential Potential to Emit (PTE) Parameters

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

Emission Limitations and Standards

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

Excess Emissions

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

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

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

[Rule 62-210.700(2), F.A.C.]

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

Monitoring of Operations

I.5. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

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

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

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or 100 tons per year or more of any other regulated air pollutant; and
   c. Any NESHAP pollutant.

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

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

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.; SIP approved]

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

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

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

Test Methods and Procedures

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

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

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

I.10. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

I.11. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

I.12. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

I.13. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

Record Keeping and Reporting Requirements

I.14. Malfunctions - Notification. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Southwest District Air Section in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Southwest District Air Section.
[Rule 62-210.700(6), F.A.C.]

I.15. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Southwest District Air Section on the results of each such test.
(b) The required test report shall be filed with the Southwest District Air Section as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Southwest District Air Section to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

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

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

Subsection J. NSPS Common Conditions.

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

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

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

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

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

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

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

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

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

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

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

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
(d) The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

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

(e)(1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
(i) For one full year (e.g., four quarterly or twelve monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;
(ii) The owner or operator continues to comply with all record keeping and monitoring requirements specified in this subpart and the applicable standard; and
(iii) The Administrator does not object to reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.
(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required record keeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.
(f) The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device

calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7 and Rule 62-213.440(1)(b)2.b., F.A.C.]

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

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart.
(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.
[40 CFR 60.8]

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

(a) Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
(b) Compliance with opacity standards in 40 CFR 60.11 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60.11, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).
(c) The opacity standards set forth in 40 CFR 60.11 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(e)(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data

for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

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

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

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

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

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

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

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13]

Subsection K. Used Oil Common Condition.

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

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

The following condition applies to the emissions units listed above:

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

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

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

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

b. Quantity Limited: The maximum quantity of on-specification used oil that may be burned in all four emissions units combined is 10 million gallons in any consecutive 12-month period.

c. Used Oil Containing PCBs Not Allowed: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. PCB Concentration of 2 to less than 50 ppm: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

Before accepting from each marketer the first shipment of on-specification used oil with a PCB concentration of 2 to 49 ppm, the owner or operator shall provide each marketer with a one-time written and signed notice certifying that the owner or operator will burn the used oil in a qualified combustion device and must identify the class of combustion device. The notice must state that EPA or a RCRA-delegated state agency has been given a description of the used oil management activities at the facility and that an industrial boiler or furnace will be used to burn the used oil with a PCB concentration of 2 to 49 ppm. The description of the used oil management activities shall be submitted to the EPA or may be submitted to the Administrator, Hazardous Waste Regulation Section, Florida Department of

Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400. A copy of the notice provided to each marketer shall be maintained at the facility. [40 CFR 279.61 and 761.20(e)]

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

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

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

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

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods), latest edition.
* Analysis for PCBs is not required if a claim is made that the used oil does not contain quantifiable levels of PCBs.

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

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

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

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

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power Corporation/Crystal River Plant
ORIS code: 628

Subsection A. This subsection addresses Acid Rain, Phase II.

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

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

A.1. The Phase II permit application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:
a. DEP Form No. 62-210.900(1)(a), dated July 1, 1995.
[Chapter 62-213, F.A.C., and Rule 62-214.320, F.A.C.]

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

E.U. ID No.	EPA ID	Year	2000	2001	2002	2003	2004
001	1	**SO2 allowances, under Table 2 or 3 of 40 CFR Part 73**	12320*	12320*	12320*	12320*	12320*
		NOx limit	Pursuant to 40 CFR part 76, the Florida Department of Environmental Protection approves a NO_X standard emissions compliance plan for unit 1. The NO_X compliance plan is effective beginning 2000 through calendar year 2003. Under the NO_X compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(1) of 0.40 lb/MMBtu for tangentially fired boilers. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and the requirements covering excess emissions.				

E.U. ID No.	EPA ID	Year	2000	2001	2002	2003	2004
002	2	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	14173*	14173*	14173*	14173*	14173*
004	4	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	23452*	23452*	23452*	23452*	23452*
003	5	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	25040*	25040*	25040*	25040*	25040*

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

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

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

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

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

A.5. 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, F.A.C.
[Rule 62-213.440(1)(c)1., F.A.C.]

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title V of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(4)(i); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

A.7. Comments, notes, and justifications: None

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

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

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

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

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

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

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

-004	4	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO_X early election compliance plan for unit 4. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and the requirements covering excess emissions.
-003	5	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO_X early election compliance plan for unit 5. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and the requirements covering excess emissions.

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

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