Barbara \ Pile



# Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

David B. Struhs Secretary

December 9, 1999

Mr. R. Douglas Neeley, Chief Air and Radiation Technology Branch Air, Pesticides and Toxics Management Division United States Environmental Protection Agency Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8909

Re:

Proposed Changes to Satisfy EPA Objections

Florida Power Corporation, Bartow Plant, PROPOSED Title V Permit 1030011-002-AV Air Construction Permit 1030011-006-AC

Dear Mr. Neeley:

This letter is to document changes that the Department proposes to satisfy EPA Region 4 objections to Florida's PROPOSED Title V permit 1030011-002-AV and 1030011-006-AC for Florida Power Corporation, Bartow Plant. These objections were detailed in a letter from EPA Region 4 dated September 16, 1999, in which EPA indicated the primary basis for objection was that the permit does not ensure compliance with the applicable requirements of 40 CFR 70.6(a)(1).

The changes proposed in this letter result primarily from a letter from Mr. W. Jeffrey Pardue, the Responsible Official for the Bartow Plant, and the past resolution to similar objections the EPA found acceptable. Hopefully these changes will allow Florida to issue the FINAL Title V permit for this plant. Please review the following proposed changes to the referenced permits. If you concur with our changes, we will issue the FINAL Title V permit with these changes.

#### I. EPA Objection Issues

1. Emissions Limitations - The statement of basis indicates that each emission unit is subject to a particulate matter emissions limit of 0.1 lb/MMBtu, and this limit is effectively equivalent to 0.149 lb/MMBtu due to rounding. This is also stated for conditions of soot blowing, where the particulate matter emission limit of 0.3 lb/MMBtu would be equivalent to 0.349 lb/MMBtu. However, these statements are incorrect. A measured emission rate of 0.149 lb/MMBtu actually rounds to 0.15 lb/MMBtu rather than 0.1 lb/MMBtu, which is in excess of the emission limit, and therefore not allowable.

Part 70 authorizes EPA to object "to issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under [part 70]." See 40 C.F.R. § 70.8(c)(1). We are objecting to the statement in the statement of basis indicating that the permit's 0.1 lb/MMbtu particulate limit is "effectively equivalent to 0.149 lb/mmbtu because of rounding." This represents an improper and incorrect statement of the legal and factual basis for the permit's 0.1 lb/MMbtu particulate limit, and therefore issuance of the proposed permit with this statement of basis does not comply with the requirement of part 70 at 40 C.F.R. § 70.7(a)(5). Moreover, emission levels of 0.149 lb/MMbtu will not assure compliance with the 0.1

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lb/MMBtu particulate limit. Accordingly, issuance of the proposed permit with this statement of basis would not assure compliance with the applicable requirement represented by the 0.1 lb/MMBtu particulate limit.

The statement of basis justifies use of rounding based on "the agreement of March 10, 1998, between EPA, Region 4 and the Department to resolve an objection on this specific issue." However, EPA's March 16, 1998, response to FDEP's March 10, 1998, letter specifically requested that language on rounding be removed from the statement of basis for five Florida Power and Light permits "in order to avoid misinterpretation." As a result, all references to rounding must be removed from the statement of basis.

Future permit determinations should provide justification for allowing annual particulate matter stack testing based on past compliance with emission limits and the potential for variability of emissions based on review of historical data. Periodic monitoring should be based on a case-by-case evaluation of emissions data rather than on a "bright line" test of whether average emissions exceed fifty percent of a "rounded" emission limit.

**PERMITTEE RESPONSE:** FPC does not agree with the EPA's objection, but does not intend to object to the removal of the specified language from the Statement of Basis.

**PROPOSED CHANGE:** The Statement of Basis will be changed as follows:

From: Unit No. 1 is a front-fired, fossil fuel steam generator which produces 120 megawatts, electric power. The maximum heat input rate is 1,220 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, and on-specification used oil. Particulate matter emissions are controlled by a General Electric Services, Inc. Model 1-BAB1.2X37(9)36.0-434-4.3P electrostatic precipitator consisting of five fields in depth. The permit application indicates this ESP was designed to operate when utilizing a coal/oil mixture which is no longer burned by FPC. Because Unit 1 is oil fired and this unit is capable of meeting the applicable particulate matter and opacity limits in Conditions A.5., A.6., A.7., and A.8. without use of the ESP, the provisions of 40 CFR 64 do not apply [40 CFR 64.2(b)(ii)]. A Durag Model 281 Continuous Emissions Monitor for opacity with a recorder is used for continual observation of stack opacity. Unit 1 began commercial service in 1958. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/MMBtu, which is effectively equivalent to 0.149 lb/MMBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue. The applicant has presented historical PM test results which show that the steady-state average results are less than half the applicable effective standard. The Department has determined that sources with emissions less than half of the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/MMBtu for Unit No. 1 is 0.054, steady-state.

Unit No. 2 is a tangential-fired fossil fuel fired steam generator which produces 120 megawatts, electric power. The maximum heat input rate is 1,317 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, on-specification used oil, and propane. Emissions from Unit No. 2 are uncontrolled. Unit 2 began commercial service in 1961. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/MMBtu, which is effectively equivalent to 0.149 lb/MMBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue. The applicant has presented historical PM test results which show that the steady-state average results are less than half the applicable effective standard. The Department has determined that

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sources with emissions less than half of the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/MMBtu for Unit No. 2 is 0.069, steady-state.

Unit No. 3 is a tangential-fired fossil fuel fired steam generator which produces 225 megawatts, electric power. The maximum heat input rate is 2,211 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, on-specification used oil, natural gas, and propane. Emissions from Unit No. 3 are uncontrolled. Unit 3 began commercial service in 1963. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/MMBtu, which is effectively equivalent to 0.149 lb/MMBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue. The applicant has presented historical PM test results which show that the steady-state average results are less than half the applicable effective standard. The Department has determined that sources with emissions less than half of the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/MMBtu for Unit No. 3 is 0.067, steady-state.

To: Unit No. 1 is a front-fired, fossil fuel steam generator which produces 120 megawatts, electric power. The maximum heat input rate is 1,220 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil. and on-specification used oil. Particulate matter emissions are controlled by a General Electric Services. Inc. Model 1-BAB1.2X37(9)36.0-434-4.3P electrostatic precipitator consisting of five fields in depth. The permit application indicates this ESP was designed to operate when utilizing a coal/oil mixture which is no longer burned by FPC. Because Unit 1 is oil fired and this unit is capable of meeting the applicable particulate matter and opacity limits in Conditions A.5., A.6., A.7., and A.8. without use of the ESP, the provisions of 40 CFR 64 do not apply [40 CFR 64.2(b)(ii)]. A Durag Model 281 Continuous Emissions Monitor for opacity with a recorder is used for continual observation of stack opacity. Unit 1 began commercial service in 1958. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/MMBtu. The applicant has presented historical PM test results which show that the steady-state average results are well below the applicable effective standard. The Department has determined that sources that consistently test below the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/MMBtu for Unit No. 1 is 0.053798, steady-state.

Unit No. 2 is a tangential-fired fossil fuel fired steam generator which produces 120 megawatts, electric power. The maximum heat input rate is 1,317 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, on-specification used oil, and propane. Emissions from Unit No. 2 are uncontrolled. Unit 2 began commercial service in 1961. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/MMBtu. The applicant has presented historical PM test results which show that the steady-state average results are well below the applicable effective standard. The Department has determined that sources that consistently test below the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/MMBtu for Unit No. 2 is 0.068616, steady-state.

Unit No. 3 is a tangential-fired fossil fuel fired steam generator which produces 225 megawatts, electric power. The maximum heat input rate is 2,211 million Btu per hour and the unit fires No. 2 through No. 6

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fuel oil, on-specification used oil, natural gas, and propane. Emissions from Unit No. 3 are uncontrolled. Unit 3 began commercial service in 1963. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/MMBtu. The applicant has presented historical PM test results which show that the steady-state average results are well below the applicable effective standard. The Department has determined that sources that consistently test below the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/MMBtu for Unit No. 3 is 0.067344, steady-state.

2. Appropriate Averaging Times - The particulate matter emission limits in conditions A.7 and A.8 do not contain averaging times. Because the stringency of emission limits is a function of both magnitude and averaging time, appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. An approach that may be used to address this deficiency is to include a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

PERMITTEE RESPONSE: The subject conditions in the PROPOSED Title V permit already contain all that is necessary to make them completely (and therefore practicably) enforceable: a requirement, and a method of determining compliance with that requirement. The subject conditions are identical, and read as follows: "Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods." This language, which is incorporated from Florida's EPA-approved SIP, clearly provides the requirement (a 0.1 pound per million Btu particulate matter limit) and the method for determining compliance ("as measured by applicable compliance methods"). The PROPOSED Title V permit clearly defines the "applicable compliance methods" – the permit specifies the test method, the number of sampling runs required, how to calculate the actual emission rate, as well as the sampling time, volume and flow rate. Where the applicable compliance method is this specific (particularly where the test method has a specified duration), enforceability is ensured at all times. Therefore, because the particulate matter limits in FPC's Bartow PROPOSED Title V permit are completely enforceable through the use of these existing conditions, the FINAL Title V conditions relating to particulate matter for this facility should be issued without change.

However, in an effort to move the Title V permitting process to conclusion, FPC is willing to accept the inclusion of a "permitting note" following Conditions A.7. and A.8., as follows:

The averaging time for the particulate matter standard corresponds to the cumulative sampling time of the specified test method.

FPC's suggested resolution of this matter does not constitute or imply concurrence with EPA's position. The Title V process is intended to consolidate existing applicable requirements for each Title V permit on a case-by-case basis, and FPC's suggested resolution applies only to the Bartow Title V facility/permit. Moreover, the language suggested above is applicable only to the existing particulate matter limit and only for the existing compliance determination method for this limit.

PROPOSED CHANGE: Add the following after both Specific Condition A.7. and A.8.:

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

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#### **II. EPA General Comments**

1. General Comment - The title page of the permit specifies that this permit determination is both a proposed title V permit and a draft construction permit. The statement of basis and the permit should both identify which conditions are part of the draft construction permit, and/or which units are subject to the construction permit.

**PERMITTEE RESPONSE:** The construction permit is meant to address the modification of the fly ash collection system associated with the Unit 1 electrostatic precipitator (ESP). The modification implemented a closed-loop system, resulting in the elimination of an emission point (ARMS Emission Unit 009). The fly ash system is now included under the listing of insignificant emission units.

**PROPOSED CHANGE:** The following will be added to both the Statement of Basis and the Facility Description under Section I:

Add: The construction permitting action changes the status of a previously permitted emissions unit, the fly ash collection system associated with the Unit 1 electrostatic precipitator (ESP). The permit to construct reclassifies the fly ash system from a regulated emissions unit to an insignificant emissions unit/activity. A previous modification implemented a closed-loop fly ash system, which replaced a conventional fly ash silo/transfer system. The fly ash system (formally called Emissions Unit I.D. No. –009) now meets the requirements of Rules 62-210.300(3)(a) and 62-213.430(6)(b), F.A.C., and is reclassified as an Insignificant Emissions Unit/Activity, where it is currently listed.

2. <u>CAM Applicability</u> - The Unit No. 1 discussions in the statement of basis and in Section III, Subsection A on page 6 of the permit, state that "the provisions of 40 CFR 64 do not apply [40 CFR 64.2(b)(ii)]." While the electrostatic precipitator for Unit No. 1 may not meet the applicability requirement for CAM specified under 40 C.F.R. 64.2(a)(2), Region 4 believes that CAM should not be referenced in the permit until a formal applicability determination has been made through the title V permit renewal process. Furthermore, reference to CAM is not necessary to support the claim that particulate and opacity limits can be met without use of the ESP.

**PERMITTEE RESPONSE:** Because 40 CFR Part 64 has been in effect for nearly two years, it is appropriate to make a CAM applicability determination in the Statement of Basis at this time. FPC has provided appropriate documentation, and the DEP has formally concurred, that CAM does not apply to this pollutant-specific emissions unit. Accordingly, FPC requests that this determination remain in the Statement of Basis.

**PROPOSED CHANGE:** No change is proposed.

3. Statement of Basis - The discussions for units 1 through 3 provide justification for annual testing of particulate matter based on five years of data showing emissions at less than half of the allowable limit. Review of the permit application indicates that FPC petitioned for annual particulate testing in accordance with the provisions of 62-296.405(1)(a) F.A.C. so that they would be allowed a visible emissions limit of 40 percent with annual, rather than quarterly, particulate testing. The statement of basis should be modified to reflect the allowance of annual particulate testing with a 40 percent VE in accordance with the SIP and supporting orders issued by FDEP.

**PERMITTEE RESPONSE:** FPC is in agreement that the proposed change to the Statement of Basis should be made.

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**PROPOSED CHANGE:** The following will be added to the Statement of Basis:

**Add:** In accordance with the provisions of Rule 62-296.405(1)(a), F.A.C., Units 1, 2 and 3 elected to test for particulate matter quarterly and were allowed visible emissions of 40 percent opacity. The Bartow Plant demonstrated that the particulate matter standard was regularly complied with for each unit and petitioned the Secretary for a reduction in the frequency of particulate matter testing from quarterly to annually, as provided by the rule. The request for annual testing was granted to Unit 1 by OGC Order No. 96-A-01, Unit 2 by OGC Order No. 87-1261 and Unit 3 by OGC Order No. 86-1577.

4. <u>Compliance Certification</u> - Facility-wide Condition 11 of the permit should specifically reference the required components of Appendix TV-3, item 51, which lists the compliance certification requirements of 40 C.F.R. 70.6(c)(5)(iii), to ensure that complete certification information is submitted to EPA.

**PERMITTEE RESPONSE:** FPC has no objection to the inclusion of the proposed language.

**PROPOSED CHANGE:** The requirement for the annual statement of compliance was contained in the Acid Rain Section of the permit. For consistency with other permits issued to date, the Specific Condition A.4. will be deleted from the Acid Rain Section and the condition will be added to the Facility-wide Requirements in Section II of the permit.

**Delete:** A.4. <u>Statement of Compliance</u>. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 52., APPENDIX TV-3, TITLE V CONDITIONS} [Rule 62-214.420(11), F.A.C.]

Add: 12. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 51., APPENDIX TV-3, TITLE V CONDITIONS} [Rule 62-214.420(11), F.A.C.]

5. <u>Minimum Sample Volume for Particulate Testing</u> - Condition A.20. specifies a minimum sample volume of 30 dry standard cubic feet for particulate testing, in accordance with 62-296.405(e)2. F.A.C. of the SIP. Condition A.26.(b) specifies a minimum sample volume of 25 dscf, or other volume as required by rule. Since these permit conditions are contradictory, a permitting note should be added to Conditions A.26.(b) to clarify that the required sample volume is 30 dry standard cubic feet.

**PERMITTEE RESPONSE:** FPC's initial comment is that the correct citation for the rule referenced above is 62-296.405(1)(e)(2). FPC further researched the State of Florida provisions under "General Compliance Test Requirements", specifically 62-297.310(4)(a)(1) and .310(4)(c). These provisions require a minimum sampling time of one hour and a minimum required flow rate of 0.5 cubic feet per minute, respectively. Effectively, these two provisions result in a minimum sample volume of 30 dscf. Therefore, FPC agrees with the change proposed by the EPA.

PROPOSED CHANGE: The following change will be made to Specific Condition A.26.:

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

To: (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet. See Specific Condition A.20.

6. Record keeping - Conditions D.19 and D.20 address record keeping for the relocatable generators. The permit states that this generator will be operated at six different facilities, five of which are not covered under this permit. This emission unit should also be included in the permits for the other five facilities. Please clarify in the statement of basis whether or not this is the case. The above referenced permit conditions require the source to keep records for the hours of operation as well as the fuel oil sulfur content in order to demonstrate compliance with operational and emission limitations. However, the permit does not indicate whether the records will be transferred with the emission unit when it is moved to another facility, or if each facility will be responsible for maintaining their own records. The permit and/or statement of basis should specify how these records will be maintained and if record keeping activities must be coordinated among the facilities.

**PERMITTEE RESPONSE:** The relocatable diesel generators are proposed to be operated at six different facilities, five of which are not covered by this permit. As correctly noted above, identical permit language has been placed in the permits for these other five facilities. The current language in each of these permit is very specific in terms of the records that must be maintained. FPC's preference is that the records be maintained at each individual site. FPC's corporate environmental services department is responsible for agency notifications and reporting and is functionally structured to provide coordination among the facilities.

PROPOSED CHANGE: The following change is made to the Statement of Basis:

From: 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 generator(s) may be relocated at any of the following facilities:

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

To: 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 generator(s) may be relocated at any of the following facilities:

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

These generator(s) are included in the Title V permits for each of the above listed facilities. The records required by the permit shall be maintained at each individual site. FPC's corporate environmental services department shall be responsible for agency notifications and reporting and is functionally structured to provide coordination among the facilities.

8. Acid Rain Requirements - Please note that the allowances allocated to the Bartow facility units 001 through 003, as indicated under Section IV, Condition A.2. of the proposed permit have been changed. This revision was published in the Federal Register on September 28, 1998 (Vol. 63 No. 187, pp 51706-51765). We recommend that the allowances that are indicated for these units be adjusted to reflect the revised allocation.

**PERMITTEE RESPONSE:** FPC agrees with the comment. The revised allowance allocations for Bartow Units 1, 2 and 3 (through 2009) are as follows: Unit 1: 2,805; Unit 2: 2,961; and Unit 3: 5,428.

**PROPOSED CHANGE:** The following changes will be made to Specific Condition A.2. of the Acid Rain Section:

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

E.U. ID No.	EPA ID	Year	2000	2001	2002	2003	2004
-001	01	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	2785*	2785*	2785*	2785*	2785*
-002	02	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	2941*	2941*	2941*	2941*	2941*
-003	03	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	5383*	5383*	5383*	5383*	5383*

• 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.]

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

E.U. ID No.	EPA ID	Year	2000	2001	2002	2003	2004
-001	01	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	2805*	2805*	2805*	2805*	2805*
-002	02	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	2961*	2961*	2961*	2961*	2961*
-003	03	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	5428*	5428*	5428*	5428*	5428*

<sup>•</sup> 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.]

As you know, the 90 day period ends December 15th. All parties involved have been expeditiously seeking resolution of these issues. We feel that EPA's concerns have been adequately addressed and we look forward to issuing final permits. Please advise as soon as possible if you concur with the specific changes detailed above. Please call me at 850/921-9503 if you have any questions. You may also contact Mr. Scott M. Sheplak, P.E., at 850/921-9532, or Mr. Edward J. Svec at 850/921-8985, if you need any additional information.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CF/es

Attachments

cc: Scott M. Sheplak

Pat Comer

Scott Osbourn, FPC



OA490 = 12114/99 **RECEIVEL**NOV 1 7 1999

BUREAU OF AIR REGULATION

November 8, 1999

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

Dear Mr. Sheplak:

Re: Florida Power Corporation's Bartow Facility

EPA Objection to Proposed Title V Permit No. 1030011-002-AV

Florida Power Corporation (FPC) is in receipt of a letter from the U.S. EPA, Region IV, dated September 16, 1999, objecting to the issuance of the above-referenced permit. The EPA has objected based on their belief that the Proposed permit does not fully meet periodic monitoring requirements, contains conditions which are unclear as to what the source must demonstrate compliance with, and is missing some Acid Rain requirements. This letter serves to provide responses to the EPA's objections in the order they were listed.

#### **EPA Objection Issues**

1. <u>Emissions Limitations</u>- The statement of basis indicates that each emission unit is subject to a particulate matter emissions limit of 0.1 lb/MMBtu, and this limit is effectively equivalent to 0.149 lb/MMBtu due to rounding. This is also stated for conditions of soot blowing, where the particulate matter emission limit of 0.3 lb/MMBtu would be equivalent to 0.349 lb/MMBtu. However, these statements are incorrect. A measured emission rate of 0.149 lb/MMBtu actually rounds to 0.15 lb/MMBtu rather than 0.1 lb/MMBtu, which is in excess of the emission limit, and therefore not allowable<sup>1</sup>.

Part 70 authorizes EPA to object "to issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under [part 70]." See 40 C.F.R. Section 70.8(c)(1). We are objecting to the statement in the statement of basis indicating that the permit's 0.1 lb/MMBtu particulate limit is "effectively equivalent to 0.149 lb/MMBtu because of rounding." This represents an improper and incorrect statement of the legal and factual basis for the permit's 0.1 lb/MMBtu particulate limit, and therefore issuance of the proposed permit with this statement of basis does not

Mr. Sheplak November 8, 1999 ♣ ⊃e 2

comply with the requirement of part 70 at 40 C.F.R. Section 70.7(a)(5). Moreover, emission levels of 0.149 lb/MMBtu will not assure compliance with the 0.1 lb/MMBtu particulate limit. Accordingly, issuance of the proposed permit with this statement of basis would not assure compliance with the applicable requirement represented by the 0.1 lb/MMBtu particulate limit.

The statement of basis justifies use of rounding based on "the agreement of March 10, 1998, between EPA, Region 4 and the Department to resolve an objection on this specific issue." However, EPA's March 16, 1998, response to FDEP's March 10, 1998, letter specifically requested that language on rounding be removed from the statement of basis for five Florida Power and Light permits "in order to avoid misinterpretation." As a result, all references to rounding must be removed from the statement of basis.

Future permit determinations should provide justification for allowing annual particulate matter stack testing based on past compliance with emission limits and the potential for variability of emissions based on review of historical data. Periodic monitoring should be based on a case-by-case evaluation of emissions data rather than on a "bright line" test of whether average emissions exceed fifty percent of a "rounded" emission limit.

Response – FPC does not agree with EPA's objection, but does not intend to object to the removal of the specified language from the Statement of Basis.

2. <u>Appropriate Averaging Times</u> – The particulate matter emission limits in conditions A.7 and A.8 do not contain averaging times. Because the stringency of emission limits is a function of both magnitude and averaging time, appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. An approach that may be used to address this deficiency is to include a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Response - The subject conditions in the Proposed Title V permit already contains all that is necessary to make them completely (and therefore practicably) enforceable: a requirement, and a method for determining compliance with that requirement. The subject conditions are identical, and read as follows: "Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods." This language, which is incorporated from Florida's EPA-approved SIP, clearly provides the requirement (a 0.1 lb/mmBTU particulate matter limit) and the method for determining compliance ("as measured by applicable compliance methods"). The Proposed Title V permit clearly defines the "applicable compliance methods" -- the permit specifies the test method, the number of sampling runs required, how to calculate the actual emission rate, as well as the sampling time, volume and flow rate. Where the applicable compliance method is this specific (particularly where the test method has a specified duration), enforceability is ensured at all times. Therefore, because the particulate matter limits in FPC's Bartow Proposed Title V permit are completely enforceable through the use of these existing conditions, the Final Title

Mr. Sheplak November 8, 1999 rge 3

V Permit conditions relating to particulate matter for this facility should be issued without change.

However, in an effort to move the Title V permitting process to conclusion, FPC is willing to accept the inclusion or a "permitting note" following Conditions A.7 and A.8, as follows:

The averaging time for the particulate matter standard corresponds to the cumulative sampling time of the specified test method.

FPC's suggested resolution of this matter does not constitute or imply concurrence with EPA's position. The Title V process is intended to consolidate existing applicable requirements for each Title V permit on a case-by-case basis, and FPC's suggested resolution applies only to the Bartow Title V facility/permit. Moreover, the language suggested above is applicable only to the existing particulate matter limit and only for the existing compliance determination method for this limit.

#### **General Comments**

3. <u>General Comment</u> – The title page of the permit specifies that this permit determination is both a proposed title V permit and a draft construction permit. The statement of basis and the permit should both identify which conditions are part of the draft construction permit, and/or which units are subject to the construction permit.

Response – The construction permit is meant to address the modification of the fly ash collection system associated with the Unit 1 electrostatic precipitator (ESP). The modification implemented a closed-loop system, resulting in the elimination of an emission point (ARMS Emission Unit 009). The fly ash system is now included under the listing of insignificant emission units.

4. <u>CAM Applicability</u> – The Unit No. 1 discussions in the statement of basis and in Section III, Subsection A on page 6 of the permit, state that "the provisions of 40 C.F.R. 64 do not apply [40 C.F.R. 64.2(b)(ii)]." While the electrostatic precipitator for Unit No. 1 may not meet the applicability requirement for CAM specified under 40 C.F.R. Section 64.2(a)(2), Region 4 believes that CAM should not be referenced in the permit until a formal applicability determination has been made through the title V permit renewal process. Furthermore, reference to CAM is not necessary to support the claim that particulate and opacity limits can be met without use of the ESP.

Response – Because 40 CFR Part 64 has been in effect for nearly two years, it is appropriate to make a CAM applicability determination in the Statement of Basis at this time. FPC has provided appropriate documentation, and the DEP has formally concurred, that CAM does not apply to this pollutant-specific emissions unit. Accordingly, FPC requests that this determination remain in the Statement of Basis.

Mr. Sheplak November 8, 1999 Tope 4

5. <u>Statement of Basis</u> — The discussions for units 1 through 3 provide justification for annual testing of particulate matter based on five years of data showing emissions at less than half of the allowable limit. Review of the permit application indicates that FPC petitioned for annual particulate testing in accordance with the provisions of 62-296.405(1)(a) F.A.C. so that they would be allowed a visible emissions limit of 40 percent with annual, rather than quarterly, particulate testing. The statement of basis should be modified to reflect the allowance of annual particulate testing with a 40 percent VE in accordance with the SIP and supporting orders issued by FDEP.

Response - FPC is in agreement that the proposed change to the statement of basis should be made.

6. <u>Compliance Certification</u> – Facility-wide Condition 11 of the permit should specifically reference the required components of Appendix TV-3, item 51, which lists the compliance certification requirements of 40 C.F.R. 70.6(c)(5)(iii), to ensure that complete certification information is submitted to EPA.

Response - FPC has no objection to the inclusion of the proposed language.

7. Minimum Sample Volume for Particulate Testing — Condition A.20. specifies a minimum sample volume of 30 dry standard cubic feet for particulate testing, in accordance with 62-296.405(e)2.F.A.C. of the SIP. Condition A.26.(b) specifies a minimum sample volume of 25 dscf, or other volume as required by rule. Since these permit conditions are contradictory, a permitting note should be added to Conditions A.26.(b) to clarify that the required sample volume is 30 dry standard cubic feet.

Response - FPC's initial comment is that the correct citation for the rule referenced above is 62-296.405(1)(e)(2). FPC further researched the State of Florida provisions under "General Compliance Test Requirements", specifically 62-297.310(4)(a)(1) and .310(4)(c). These provisions require a minimum sampling time of one hour and a minimum required flow rate of 0.5 cubic feet per minute, respectively. Effectively, these two provisions result in a minimum sample volume of 30 dscf. Therefore, FPC agrees with the change proposed by the EPA.

8. Record keeping – Condition D.19 and D.20 address record keeping for the relocatable generators. The permit states that this generator will be operated at six different facilities, five of which are not covered under this permit. This emission unit should also be included in the permits for the other five facilities. Please clarify in the statement of basis whether or not this is the case. The above referenced permit conditions require the source to keep records for the hours of operation as well as the fuel oil sulfur content in order to demonstrate compliance with operational and emission limitations. However, the permit does not indicate whether the records will be transferred with the emission unit when it is moved to another facility, or if each facility will be responsible for maintaining their own

Mr. Sheplak November 8, 1999 Page 5

records. The permit and/or statement of basis should specify how these records will be maintained and if record keeping activities must be coordinated among the facilities.

Response - The relocatable diesel generators are proposed to be operated at six different facilities, five of which are not covered by this permit. As correctly noted above, identical permit language has been placed in the permits for these other five facilities. The current language in each of these permits is very specific in terms of the records that must be maintained. FPC's preference is that the records be maintained at each individual site. FPC's corporate environmental services department is responsible for agency notifications and reporting and is functionally structured to provide coordination among the facilities.

9. <u>Acid Rain Requirements</u> – Please note that the allowances allocated to the Bartow facility units 001 through 003, as indicated under Section IV, Condition A.2. of the proposed permit have been changed. This revision was published in the Federal Register on September 28, 1998 (Vol. 63 No. 187, pp 51706-51765). We recommend that the allowances that are indicated for these units be adjusted to reflect the revised allocation.

Response - FPC agrees with this comment. The revised allowance allocations for Bartow Units 1, 2 and 3 (through 2009) are as follows: Unit 1; 2,805; Unit 2; 2,961; and Unit 3; 5,428.

Thank you for your attention to these issues. If you have any questions regarding FPC's response or wish to discuss this matter further, please contact Scott Osbourn at (727) 826-4258 or me at (727) 826-4301.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, FPC Environmental Services Department Responsible Official for Bartow Title V permit

cc: Howard Rhodes, DEP
Clair Fancy, DEP
Winston A. Smith, EPA
Greg Worley, EPA
Elizabeth Bartlett, EPA
Robert Manning, HGSS

12/8/99 cc = Ed Svec



RECEIVEL NOV 1 5 1999

BUREAU OF AIR REGULATIO"

November 8, 1999

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

Dear Mr. Sheplak:

Re: Florida Power Corporation's Bartow Facility

EPA Objection to Proposed Title V Permit No. 1030011-002-AV

Florida Power Corporation (FPC) is in receipt of a letter from the U.S. EPA, Region IV, dated September 16, 1999, objecting to the issuance of the above-referenced permit. The EPA has objected based on their belief that the Proposed permit does not fully meet periodic monitoring requirements, contains conditions which are unclear as to what the source must demonstrate compliance with, and is missing some Acid Rain requirements. This letter serves to provide responses to the EPA's objections in the order they were listed.

#### **EPA Objection Issues**

1. <u>Emissions Limitations</u>- The statement of basis indicates that each emission unit is subject to a particulate matter emissions limit of 0.1 lb/MMBtu, and this limit is effectively equivalent to 0.149 lb/MMBtu due to rounding. This is also stated for conditions of soot blowing, where the particulate matter emission limit of 0.3 lb/MMBtu would be equivalent to 0.349 lb/MMBtu. However, these statements are incorrect. A measured emission rate of 0.149 lb/MMBtu actually rounds to 0.15 lb/MMBtu rather than 0.1 lb/MMBtu, which is in excess of the emission limit, and therefore not allowable<sup>1</sup>.

Part 70 authorizes EPA to object "to issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under [part 70]." See 40 C.F.R. Section 70.8(c)(1). We are objecting to the statement in the statement of basis indicating that the permit's 0.1 lb/MMBtu particulate limit is "effectively equivalent to 0.149 lb/MMBtu because of rounding." This represents an improper and incorrect statement of the legal and factual basis for the permit's 0.1 lb/MMBtu particulate limit, and therefore issuance of the proposed permit with this statement of basis does not

comply with the requirement of part 70 at 40 C.F.R. Section 70.7(a)(5). Moreover, emission levels of 0.149 lb/MMBtu will not assure compliance with the 0.1 lb/MMBtu particulate limit. Accordingly, issuance of the proposed permit with this statement of basis would not assure compliance with the applicable requirement represented by the 0.1 lb/MMBtu particulate limit.

The statement of basis justifies use of rounding based on "the agreement of March 10, 1998, between EPA, Region 4 and the Department to resolve an objection on this specific issue." However, EPA's March 16, 1998, response to FDEP's March 10, 1998, letter specifically requested that language on rounding be removed from the statement of basis for five Florida Power and Light permits "in order to avoid misinterpretation." As a result, all references to rounding must be removed from the statement of basis.

Future permit determinations should provide justification for allowing annual particulate matter stack testing based on past compliance with emission limits and the potential for variability of emissions based on review of historical data. Periodic monitoring should be based on a case-by-case evaluation of emissions data rather than on a "bright line" test of whether average emissions exceed fifty percent of a "rounded" emission limit.

Response – FPC does not agree with EPA's objection, but does not intend to object to the removal of the specified language from the Statement of Basis.

2. <u>Appropriate Averaging Times</u> – The particulate matter emission limits in conditions A.7 and A.8 do not contain averaging times. Because the stringency of emission limits is a function of both magnitude and averaging time, appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. An approach that may be used to address this deficiency is to include a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Response - The subject conditions in the Proposed Title V permit already contains all that is necessary to make them completely (and therefore practicably) enforceable: a requirement, and a method for determining compliance with that requirement. The subject conditions are identical, and read as follows: "Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods." This language, which is incorporated from Florida's EPA-approved SIP, clearly provides the requirement (a 0.1 lb/mmBTU particulate matter limit) and the method for determining compliance ("as measured by applicable compliance methods"). The Proposed Title V permit clearly defines the "applicable compliance methods" -- the permit specifies the test method, the number of sampling runs required, how to calculate the actual emission rate, as well as the sampling time, volume and flow rate. Where the applicable compliance method is this specific (particularly where the test method has a specified duration), enforceability is ensured at all times. Therefore, because the particulate matter limits in FPC's Bartow Proposed Title V permit are completely enforceable through the use of these existing conditions, the Final Title

Mr. Sheplak November 8, 1999 Page 3

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Mr. Sheplak November 8, 1999 Page 5

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Response - FPC agrees with this comment. The revised allowance allocations for Bartow Units 1, 2 and 3 (through 2009) are as follows: Unit 1: 2,805; Unit 2: 2,961; and Unit 3: 5,428.

Thank you for your attention to these issues. If you have any questions regarding FPC's response or wish to discuss this matter further, please contact Scott Osbourn at (727) 826-4258 or me at (727) 826-4301.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Director, FPC Environmental Services Department

Responsible Official for Bartow Title V permit

CC: Howard Rhodes, DEP Clair Fancy, DEP Winston A. Smith, EPA Greg Worley, EPA Elizabeth Bartlett, EPA Robert Manning, HGSS

XC: El Suec

Express Mail   Insure   Saint Petersburg, FL 33711   Return Receipt for Merchandise   COD	Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we card to you.		I also wish to re following service extra fee):	
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### Department of **Environmental Protection**

Jeb Bush Governor

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

David B. Struhs Secretary

September 22, 1999

#### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

EPA Objection to PROPOSED Title V Permit No. 1030011-002-AV

Bartow Power Plant

Dear Mr. Pardue:

On September 16, the department received a timely written objection from the United States Environmental Protection Agency to the referenced proposed permit. A copy of EPA's objection is attached.

In accordance with Section 403.0872(8), Florida Statutes (F.S.), the department must not issue a final permit until the objection is resolved or withdrawn. Pursuant to Section 403.0872(8), F.S., the applicant may file a written reply to the objection within 45 days after the date on which the department serves the applicant with a copy of the objection. The written reply must include any supporting materials that the applicant desires to include in the record relevant to the issues raised by the objection. The written reply must be considered by the department in issuing a final permit to resolve the objection of EPA. Please submit any written comments you wish to have considered concerning the objection to Mr. Scott M. Sheplak, P.E., at the above letterhead address.

Pursuant to 40 CFR 70.8(c)(4) the department will have to resolve the objection by issuing a permit that satisfies EPA within 90 days of the objection, or EPA will assume authority for the permit.

If you should have any questions, please contact Mr. Scott M. Sheplak, P.E., at 850/921-9532.

Sincerely.

Chief

Bureau of Air Regulation

CHF/sms/k

Enclosure

Pat Comer, OGC w/ enclosure Douglas Neeley, USEPA w/o enclosure Gregg Worley, USEPA w/o enclosure



#### **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 1 6 1999

**4APT-ARB** 

Howard L. Rhodes, Director Air Resources Management Division Florida Department of Environmental Protection Mail Station 5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400 RECEIVED

SEP 2.0 1999

DIVISION OF AIR

RESOURCES MANAGEMENT

SUBJ: EPA's Review of Proposed Title V Permit Florida Power Corporation Bartow Power Plant Permit No. 1030011-002-AV

Dear Mr. Rhodes:

The purpose of this letter is to provide comments to the Florida Department of Environmental Protection (DEP) on the proposed title V operating permit for Florida Power Corporation, Bartow Power Plant, which was posted on DEP's web site on August 3, 1999. Based on the Environmental Protection Agency's (EPA's) review of the proposed permit and the supporting information for this facility, EPA formally objects, under the authority of Section 505(b) of the Clean Air Act (the Act) and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the title V permit for this facility. The basis of EPA's objection is that the permit does not ensure compliance with the applicable requirements of 40 C.F.R. § 70.6(a)(1).

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or 40 C.F.R. Part 70. Section 70.8(c)(4) and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be addressed prior to the expiration of the 90-day period.

Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. Part 70. The enclosure also contains general comments applicable to the permit.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief, Operating Source Section at (404) 562-9141. Should your staff need additional information they may contact Ms. Elizabeth Bartlett, Florida Title V Contact, at (404) 562-9122, or Ms. Angelia Souder-Blackwell, Associate Regional Counsel, at (404) 562-9527.

Sincerely,

Winston A. Smith

Director

Air, Pesticides & Toxics Management Division

#### Enclosure

cc: Mr. W. Jeffrey Pardue, Director Environmental Services Dept. Florida Power Corporation

#### Enclosure

U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
Florida Power Corporation
Bartow Power Plant
Permit no. 1030011-002-AV

#### I. EPA Objection Issues

1. <u>Emissions Limitations</u> - The statement of basis indicates that each emission unit is subject to a particulate matter emissions limit of 0.1 lb/MMBtu, and this limit is effectively equivalent to 0.149 lb/MMBtu due to rounding. This is also stated for conditions of soot blowing, where the particulate matter emission limit of 0.3 lb/MMBtu would be equivalent to 0.349 lb/MMBtu. However, these statements are incorrect. A measured emission rate of 0.149 lb/MMBtu actually rounds to 0.15 lb/MMBtu rather than 0.1 lb/MMBtu, which is in excess of the emission limit, and therefore not allowable<sup>1</sup>.

Part 70 authorizes EPA to object "to issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under [part 70]." Sec 40 C.F.R. § 70.8(c)(1). We are objecting to the statement in the statement of basis indicating that the permit's 0.1 lb/MMbtu particulate limit is "effectively equivalent to 0.149 lb/mmbtu because of rounding." This represents an improper and incorrect statement of the legal and factual basis for the permit's 0.1 lb/MMbtu particulate limit, and therefore issuance of the proposed permit with this statement of basis does not comply with the requirement of part 70 at 40 C.F.R. § 70.7(a)(5). Moreover, emission levels of 0.149 lb/MMbtu will not assure compliance with the 0.1 lb/MMBtu particulate limit. Accordingly, issuance of the proposed permit with this statement of basis would not assure compliance with the applicable requirement represented by the 0.1 lb/MMBtu particulate limit.

According to the June 6, 1990 memorandum "Performance Test Calculation Guidelines", issued by William G. Laxton, Director of the Technical Support Division, OAQPS, and John S. Seitz, Director of the Stationary Source Compliance Division, OAQPS, when calculating and reporting emission rates and concentrations in determining compliance with the new source performance standards (NSPS) and national emission standards for hazardous pollutants (NESHAP), as well as state implementation plans (SIP's), all emission standards should be considered to have at least two significant figures (SF's), but no more than three. Therefore, since the 0.1 lb/MMBtu emission limit for particulate matter comes from the Florida state SIP, it should be considered to have two SF's. In this case, the emission limit effectively becomes 0.10 lb/MMBtu. In order to comply with the emission limit of 0.1 lb/MMBtu, the highest allowable measured emission rate (measured to four SF's) is 0.1049 lb/MMBtu.

The statement of basis justifies use of rounding based on "the agreement of March 10, 1998, between EPA, Region 4 and the Department to resolve an objection on this specific issue." However, EPA's March 16, 1998, response to FDEP's March 10, 1998, letter specifically requested that language on rounding be removed from the statement of basis for five Florida Power and Light permits "in order to avoid misinterpretation." As a result, all references to rounding must be removed from the statement of basis.

Future permit determinations should provide justification for allowing annual particulate matter stack testing based on past compliance with emission limits and the potential for variability of emissions based on review of historical data. Periodic monitoring should be based on a case-by-case evaluation of emissions data rather than on a "bright line" test of whether average emissions exceed fifty percent of a "rounded" emission limit.

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#### II. General Comments

- 3. General Comment The title page of the permit specifies that this permit determination is both a proposed title V permit and a draft construction permit. The statement of basis and the permit should both identify which conditions are part of the draft construction permit, and/or which units are subject to the construction permit.
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- 6. <u>Compliance Certification</u> Facility-wide Condition 11 of the permit should specifically reference the required components of Appendix TV-3, item 51, which lists the compliance certification requirements of 40 C.F.R. 70.6(c)(5)(iii), to ensure that complete certification information is submitted to EPA.
- 7. <u>Minimum Sample Volume for Particulate Testing</u> Condition A.20. specifies a minimum sample volume of 30 dry standard cubic feet for particulate testing, in accordance with 62-296.405(e)2. F.A.C. of the SIP. Condition A.26.(b) specifies a minimum sample volume of 25 dscf, or other volume as required by rule. Since these permit conditions are contradictory, a permitting note should be added to Conditions A.26.(b) to clarify that the required sample volume is 30 dry standard cubic feet.
- 8. Record keeping Conditions D.19 and D.20 address record keeping for the relocatable generators. The permit states that this generator will be operated at six different facilities, five of which are not covered under this permit. This emission unit should also be included in the permits for the other five facilities. Please clarify in the statement of basis whether or not this is the case. The above referenced permit conditions require the source to keep records for the hours of operation as well as the fuel oil sulfur content in order to demonstrate compliance with operational and emission limitations. However, the permit does not indicate whether the records will be transferred with the emission unit when it is moved to another facility, or if each facility will be responsible for maintaining their own records. The permit and/or statement of basis should specify how these records will be maintained and if record keeping activities must be coordinated among the facilities.
- 9. Acid Rain Requirements Please note that the allowances allocated to the Bartow facility units 001 through 003, as indicated under Section IV, Condition A.2. of the proposed permit have been changed. This revision was published in the Federal Register on September 28, 1998 (Vol. 63 No. 187, pp 51706-51765). We recommend that the allowances that are indicated for these units be adjusted to reflect the revised allocation.

#### Florida's PROPOSED Permit Electronic Notification Cover Memorandum

TO: Gracy Danois, U.S. EPA Region 4

CC: Carla E. Pierce, U.S. EPA Region 4

THRU: Scott Sheplak, P.E., Bureau of Air Regulation

FROM: Edward J. Svec, Permit Engineer

**DATE:** August 2, 1999

RE: U.S. EPA Region 4 PROPOSED Title V Operation Permit Review

The following PROPOSED Title V operation permit(s) and associated documents have been posted on the DEP World Wide Web Internet site for your review. Please provide any comments via Internet E-mail, within forty five (45) days of receiving this notice, to Scott Sheplak, at "SHEPLAK\_S@dep.state.fl.us".

Applicant Name

County

Method of Transmittal

Electronic File Name(s)

Florida Power Corporation

Pinellas

INTERNET

1030011p.zip

This zipped file contains the following electronic files:

1030011p.doc 10300111.xls 10300112.xls 1030011g.doc 1030011u.doc 1030011h.doc sob.doc

### Florida Department of Environmental Protection

Excellent 306!

TO:

C. H. Fancy

THRU:

Scott Sheplak

THRU:

Bruce Mitchell

**FROM** 

Ed Svec

DATE:

July 29, 1999

SUBJECT:

PROPOSED Title V Permit

Attached is the combined PROPOSED Title V Permit 1030011-002-AV and Air Construction Permit 1030011-006-AC for Florida Power Corporation's Bartow Facility for your review and approval. Nine comments on the Revised DRAFT permit were received and addressed from PCDEM and four comments were received and addressed from FPC. Their extension of time to file for hearing expires on August 1, 1999.

I recommend your approval of this PROPOSED permit.

attachments



Jeb Bush Governor

## Department : Environmental Pr

Twin Towers Office Buildi 2600 Blair Stone Road Tallahassee, Florida 32399-2 Copy of A allowards

FPC-Barton Lylandragh

include Scrivenov's Order

PROPOSED Permit Electronic Posting

Florida Power Corporation
Bartow Plant
Facility ID No.: 103001Pinellas County

Pobert Minning

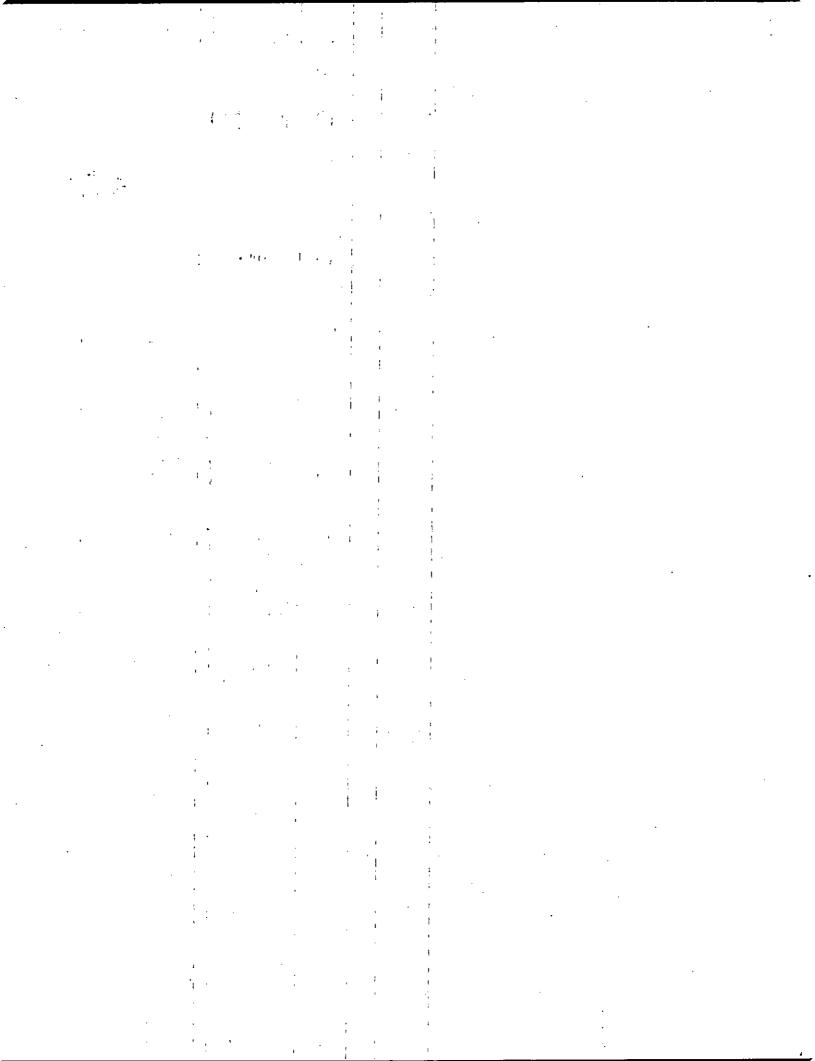
Initial Title V Air Operation Permit **PROPOSED Permit No.:** 1030011-002-AV

The electronic version of the PROPOSED permit was 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 on August 3, 1999.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is September 17, 1999 If an objection (veto) is received from USEPA, the permitting authority will provide a copy of the objection to the applicant.

Provided an objection is not received from USEPA, the PROPOSED permit will become a FINAL permit by operation of law on the 55th day after the permit posting date. Day 55 is September 27, 1999.

The web site address is http://www2.dep.state.fl.us/air.



#### STATEMENT OF BASIS

11.

Florida Power Corporation
Bartow Plant
Facility ID No.: 1030011
Pinellas County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 1030011-002-AV

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

This facility consists of three fossil fuel fired steam generators subject to Phase II Acid Rain, a pipeline heating boiler, four gas turbine peaking units and relocatable diesel generators that can be located at various Florida Power Corporation power plants, as needed.

Unit No. 1 is a front-fired, fossil fuel steam generator which produces 120 megawatts, electric power. The maximum heat input rate is 1,220 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, and on-specification used oil. Particulate matter emissions are controlled by a General Electric Services, Inc. Model 1-BAB1.2X37(9)36.0-434-4.3P electrostatic precipitator consisting of five fields in depth. The permit application indicates this ESP was designed to operate when utilizing a coal/oil mixture which is no longer burned by FPC. Because Unit 1 is oil fired and this unit is capable of meeting the applicable particulate matter and opacity limits in Conditions A.5., A.6., A.7., and A.8. without use of the ESP, the provisions of 40 CFR 64 do not apply [40 CFR 64.2(b)(ii)]. A Durag Model 281 Continuous Emissions Monitor for opacity with a recorder is used for continual observation of stack opacity. Unit 1 began commercial service in 1958. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low - emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/mmBtu, which is effectively equivalent to 0.149 lb/mmBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue. The applicant has presented historical PM test results which show that the steady-state average results are less than half the applicable effective standard. The Department has determined that sources with emissions less than half of the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/mmBtu for Unit No. 1 is 0.053798, steady-

#### STATEMENT OF BASIS

Florida Power Corporation
Bartow Plant
Facility ID No.: 1030011
Pinellas County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 1030011-002-AV

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.

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Page 2 of 3 Bartow Plant

Unit No. 2 is a tangential-fired fossil fuel fired steam generator which produces 120 megawatts, electric power. The maximum heat input rate is 1,317 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, on-specification used oil, and propane. Emissions from Unit No. 2 are uncontrolled. Unit 2 began commercial service in 1961. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/mmBtu, which is effectively equivalent to 0.149 lb/mmBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue. The applicant has presented historical PM test results which show that the steady-state average results are less than half the applicable effective standard. The Department has determined that sources with emissions less than half of the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/mmBtu for Unit No. 2 is 0.068616, steady-state.

Unit No. 3 is a tangential-fired fossil fuel fired steam generator which produces 225 megawatts, electric power. The maximum heat input rate is 2,211 million Btu per hour and the unit fires No. 2 through No. 6 fuel oil, on-specification used oil, natural gas, and propane. Emissions from Unit No. 3 are uncontrolled. Unit 3 began commercial service in 1963. The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified by the low emission rate documented in previous emissions tests while firing fuel oil. This unit is subject to a steady-state PM emission limit of 0.1 lb/mmBtu, which is effectively equivalent to 0.149 lb/mmBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue. The applicant has presented historical PM test results which show that the steady-state average results are less than half the applicable effective standard. The Department has determined that sources with emissions less than half of the effective standard shall test annually. A five year average of results of particulate matter emission testing in lb/mmBtu for Unit No. 3 is 0.067344, steady-state.

The Bartow-Anclote Pipeline Heating Boiler is used to heat fuel oil being transferred from the Bartow Plant to the Anclote Plant. The boiler's maximum heat input rate is 15.5 million Btu per hour firing natural gas, No. 2 fuel oil, or propane. Emissions from the boiler are uncontrolled.

The four gas turbines are natural gas and/or No. 2 fuel oil fired combustion turbines manufactured by General Electric (model number MS7000) and are designated as Gas Turbine Peaking Units #P-1, #P-2, #P-3 and #P-4. The manufacturers fuel flow and heat input ratings for each turbine are 5,174 gallons per hour of No. 2 fuel oil, or 714 million cubic feet per hour of natural gas (corresponds to approximately 714 million Btu per hour, at 59 degrees F). The actual heat input rate of the turbine is a function of the ambient temperature. These combustion turbines are used as peaking units during peak demand times to run a nominal 56 MW generator (each). Emissions from the combustion turbines are uncontrolled. The Department has determined that the appropriate visible emissions (VE) testing frequency for the four combustion turbines is a VE test upon exceeding 400 hours of operation on fuel oil in any federal fiscal year

Page 3 of 3 Bartow Plant

(October 1 through September 30). This frequency is justified by the low historical use of fuel oil for these emissions units and the previous VE tests, which documented compliance while firing fuel oil. Moreover, no Method 9 test since 1994 on these emissions units have resulted in an opacity measurement greater than half of the standard. Regarding hours of operation, these emissions units had not significantly exceeded 400 hours per year (going back to 1994), until the summer of 1998. The highest turbine hours of operation on oil for each year are: 1998 (P1) 724 hours; 1997 (P3) 297 hours; 1996 (P2) 308 hours; 1995 (P2) 355 hours; and, 1994 (P2) 235 hours. All electric generating units, not only within FPC's system, but state-wide, operated at record levels during the summer of 1998. The owner or operator will be conducting VE compliance tests while firing fuel oil for each combustion turbine upon that combustion turbine exceeding 400 hours of operation on fuel oil in any federal fiscal year (October 1 through September 30). Regardless of the number of hours of operation on fuel oil, at least one VE compliance test will be conducted on all four combustion turbines every five (5) years, coinciding with the term of the operation permit for these combustion turbines.

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 generator(s) may be relocated at any of the following facilities:

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

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.

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, 1997, this facility is a major source of hazardous air pollutants (HAPs).

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

Florida Power Corporation PROPOSED Permit No.: 1030011-002-AV Bartow Plant Facility ID No.: 1030011

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

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

E.U. ID	
No.	Brief Description of Emissions Units and/or Activity
-xxx	General Boiler Building - Emergency diesel generator (basement) - 300 gallon fuel oil tank
-xxx	North Terminal - Diesel engine - Cummings 175 hp - 150 gallon No. 2 oil tank
-xxx	South Terminal - Gasoline tank, filling station
-xxx	South Terminal - No. 2 oil storage tank
-xxx	Turbine - Solvent Storage - Navee cleaner storage tank (4X4X4)
-xxx	Gas Turbine 1, 2, 3, and 4 - Lube oil vent with demister
-xxx	Gas Turbine 1, 2, 3, and 4 - Underground 2,600 gallon lube oil storage tank
-xxx	Gas Turbine 1, 2, 3, and 4 - 500 gallon waste oil storage tank
-xxx	Fuel Storage - Tank No. 1,2 and 3 - 150,000 bbls No. 6 fuel oil
-xxx	Fuel Storage - Tank No. 4 and 5 - 200,000 bbls No. 6 fuel oil
-xxx	Fuel Storage - Tank No. 6 - 100,000 bbls No. 2 fuel oil
-xxx	Fuel Storage - Tank No. 7 and 8 - 259,000 bbls No. 6 fuel oil
-xxx	General Site - Two, 500 gallon propane gas tanks for Unit 2 and 3 ignitors
-xxx	Tank No. CT#01(2R), CT#02(3R), and CT#03(4R), CT#04(5R) - 5,509 gallons waste oil
-xxx	Tank No. CT#6(11) - 4,118,142 gallons No. 2 fuel oil
-xxx	Tank No. #1(1R) - 1,008 gallons unleaded gasoline
-xxx	Tank No. #2(16) - 34,128 gallons No. 2 fuel oil
-xxx	Tank No. #4(7) - 6,354,768 gallons No. 6 fuel oil
-xxx	Tank No. #12 - 100 gallons diesel - emergency fire pump
-xxx	Tank No. #13 - 200 gallons diesel - emergency generator
-xxx	Tank No. #15(6) - 550 gallons diesel - vehicle
-xxx	Tank No. #16(19) - 65,460 gallons fuel additive
-xxx	Tank No. Boiler Day Tk(15) - 18,675 gallons No. 2 fuel oil
-xxx	Tank No. Terminal #1(9) - 6,329,232 gallons No. 6 fuel oil
-xxx	Tank No. Terminal #2(10) - 8,447,544 gallons No. 6 fuel oil
-xxx	Tank No. Terminal #3(12) - 10,540,740 gallons No. 6 fuel oil
-xxx	Tank No. Terminal #4(13) - 10,542,294 gallons No. 6 fuel oil
-xxx	Tank No. Substation #1 and Substation #2 - 16,002 gallons cable oil

[electronic file name: 1030011u.doc]

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

Florida Power Corporation
Bartow Plant

PROPOSED Permit No.: 1030011-002-AV

Facility ID No.: 1030011

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

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

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

- 1. Water Laboratory solvent use and hood-chemical analyses for water
- 2. Water Laboratory flammable chemical storage cabinet
- 3. Machine Shop sand blaster, drill press, welding, lathes, hand-held tools, ect.
- 4. General Boiler Building fire protection equipment
- 5. North Terminal Diesel fire pump building flammable liquid cabinet
- 6. North Terminal Foam Building Nat. foam XL 3%; 2,600 gallons
- 7. South Terminal Machine Shop sand blaster, drill press, welding, lathes, hand-held tools, ect.
- 8. Turbine Fire Protection CO2 fire system
- 9. Fuel Storage foam fire protection system
- 10. General Site surface coating <6.0 gallons per day
- 11. General Site brazing, soldering and welding
- 12. Unit 1 Fly Ash Handling System

[electronic file name: 1030011g.doc]

Page 1 of 4

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

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

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

Brief Description

No. 1 Unit, Fossil Fuel Fired Steam Generator with Electrostatic Precipitator

No. 2 Unit, Fossil Fuel Fired Steam Generator

No. 3 Unit, Fossil Fuel Fired Steam Generator E.U. ID No. [-001] [-002] [-003]

			Allowable Emissions					
Pollutant Name	Fuel(s)	Houre/Year	Standard(s)	lbs./hour	γd1	the free to the true to the tr	Regulatory Citation(s)	Saa parmit condition(s)
PM [EU:001]	All	8,760	8,760 0.1 Ib/MMBtu	122.0	534.4		Rules 62-296.405(1)(b), 62-296.700(4)(b) & 82-296.702(2)(a)	Α.7
PM [EU:002]	All	8,760	8.760 0.1 lb/MMBtu	131.7	576.9		Butes 62-296-405(1)(b) 62-298 700(4)(b) A 62-296 702(7)(c)	- V
PM [EU.003]	ΑII	8,760	8,760 0.1 Ib/MMBtu	221.1	968.6		Rules 62-296,405(1)(b), 62-296,700(4)(b) & 62-296,702(2)(a)	7.4
PM [EU-001]	ΑÜ	8,760	8,760 0.3 1b/MMBtu	366.0			Rules 62-210,700(3) & 62-296,700(4)(b)	8
PM [EU:002]	Αll	8,760	8,760 0.3 Ib/MMBtu	395.1			Rules 62-210, 700(31 & 62-296, 700(4)(b)	8
PM (EU-003)	ΑII	8,760	8,760 0.3 Ib/MMBtu	663.3			Rules 62-210,700(3) & 62-296,700(4)(b)	8.4
SO, [EU-001]	Liquid	8,760	8,760 2.75 lb/MMBtu			3.365.0 14.694.3	Pule 62-296,405(1)(c)1.i.	64
SO <sub>2</sub> (EU-002)	Liquid	8,760	8,760 2.75 Ib/MMBtu				Rule 62-296,405(1)(c)1.i.	6
SO <sub>2</sub> (EU-00:3)	Liquid	8,760	8,760 2,75 Ib/MMBtu			5,080,25 25,631.5	Rule 62-296.405(1)(c)1.	64
502	Liquid	8,760	8,760 2.5% by weight sulfur				Rule 62-296.405(11(e)3	A10
VE	All	8,760	8,760 40% opacity		_		Rule 62-296.405(11fal & OGC Orders 86-1577 & 87-1281	. d
JVF.	All All	3 hv/24 hv	60% operator				וכיועטל ארב פא יויקן	
	!						101001:017:017:01	
				_			_	
				•				

Notes: The "Equivalent Emissions" listed are for informational purposes only.

Page 2 of 4

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

PROPOSED Permit No.: 1030011-002.AV Facility ID No.: 1030011

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

E.U. ID No. [-004]

Brief Description Bartow-Anclote Pipeline Heating Boiler

		•					
	j		Allowable Emissions		Equivalent Emissions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY tbs://	Regulatory Citation(s)	See permit condition(s)
502	Liquid	8,760	8,760 0.5% by weight sulfur		8.52	ule 6	B.7.
VE	ΑII	8,760	8,760 20% except 40% 2 min/hr			Buls 62,296 406/11	L L
VF	Ψ.	3 h./24 h.	8004 pp. 2004	_		( ) DO + CO - ZO BIOL	Constant
	Ī		Apped Aco	-		Rule 62-210.700(3)	ල් ස
Notes;	,						

The "Equivalent Emissions" listed are for informational purposes only.

Page 3 of 4

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

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

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

Brief Description
Gas Turbine Peaking Unit #P-1
Gas Turbine Peaking Unit #P-2
Gas Turbine Peaking Unit #P-3
Gas Turbine Peaking Unit #P-4 E.U. ID No. [-005] [-006] [-007] [-008]

Equivarient Embsiph	Standardis) lbs./hour TPY (bs./hos) RPY Regulatory Citation(s) See permit condition(s)	
Allowable Emissions	Standard(s)	8,760 20% opacity
	Hours/Year	9,760
	Fuel(s)	
:	LI	<u> </u>

\* The "Equivalent Emissions" listed are for informational purposes only.

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

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

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

E.U. ID No. [-xxx]

Brief Description Relocatable Diesel Fired Generator(s)

•	ion(s)		
	See permit condition(s)	D.4. & D.5.	
	Regulatory Citation(s)	Applicant request & AC09-205980 Applicant request & AO09-205952	
Stativalent Emissions*	TPY	1,416	
	tbs./hour TPY	-	
ons		Suitur	
Allowable Emissions	r Standard(s)	2,970 0.5% by weight Sulfur 2,970 20% opacity	
	Hours	9, 3, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9,	
	Pollutant Name Fuel(s)	All All	
	Pallı	. VE	Notes.

The "Equivalent Emissions" listed are for informational purposes only.

# Table 2-1, Summary of Compliance Requirements

Florida Power Corporation Bartow Plant

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

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

E.U. ID No. Brief Description

1-001] No. 1 Unit, Fossil Fuel Fired Steam Generator with Electrostatic Precipitator

1-002] No. 2 Unit, Fossil Fuel Fired Steam Generator

1-003] No. 3 Unit, Fossil Fuel Fired Steam Generator

					_								_
		See permit condition(s)	A.19., A.29, and A.30.	A.19.and A.30.	A.20., A.29.and A.31.	A.20.and A.31,	A.21, and A.22.	A.11., A.12., A.13., & A.32.					
		CMS.	Yes						 			_	
Min. Compliance	Test	Duration	60 min	60 min	1 hr	1 1,4	1 hr						
Frequency	Base	Date •	3/16 & 9/16	5/28 & 4/28	3/16 & 9/16	5/28 & 4/28	w/ PM test			٠			
Testing	Time	Frequency	6 months	Annual	6 months	Annual	Annual	each batch					
	Compliance	Method	EPA Method 9	EPA Method 9	EPA Method 17, 5, 5B or 5F	EPA Method 17, 5, 58 or 5F	EPA Method 6, 6A, 6B, or 6C; or fuel analysis	EPA SW-846					
_		Fuel(s)	All	All	٩II	All	Liquid	On-specification					
	Pollutant Name	or Parameter	VE EUF-001]	VE EUI-002 & -003]	PM EUI-0011	PM EU[-002 & -003]	502	Used oil					

Notes: • The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

\*\*CMS [ = ] continuous monitoring system

Table 2-1, Summary of Compliance Requirements

Florida Power Corporation

Bartow Plant

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

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

Brief Description Bartow-Anclote Pipeline Heating Boiler E.U. ID No.

-
Notes:

\* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

\* \* CMS [=] continuous monitoring system

### Page 3 of 4

Table 2-1, Summary of Compliance Requirements

Florida Power Corporation Bartow Plant

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

\*

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

Brief Description	Gas Turbine Peaking Unit #P-1	Gas Turbine Peaking Unit #P-2	Gas Turbine Peaking Unit #P-3	Gas Turbine Peaking Unit #P-4
E.U. ID No.	[-005]	1900-1	1-0071	[800-]

		Г								-
		See permit condition(s)	C.11. & C.16.	C.12.				-		
		CMS**			 					<u> </u>
Min. Compliance	Test	Duration	1-Feb 30 min							
Frequency	Base	Date *	1-Feb							
Testing	Time	Frequency	Annual	each delivery						
	Compliance	Method	EPA Method 9	ASTM Methods						
		Fuel(s)	ΑII	Liquid						
	Pollutant Name	or Parameter	VE	SO <sub>2</sub>						Notes:

<sup>1</sup> The frequency base date is established for planning purposes only; see Rule 62-297,310, F.A.C.

\* \* CMS [=] continuous monitoring system

Table 2-1, Summary of Compliance Requirements

PROPOSED Permit No.: 1030011-002-AV Facility ID No.: 1030011

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

E.U. ID No.

Brief Description Relocatable Diesel Fired Generator(s)

		See permit condition(s)			
		See permit	D.11.	D.12.	-
		CMS			
Min. Compliance	Test	Duration	30 min		
Frequency	Base	Date *	30 days from startup		-
Testing	Time	Frequency	Annual	each delivery	
	Compliance	Method	EPA Method 9	ASTM Methods	
		Fuel(s)		Liquid	
	Pollutant Name	or Parameter	۸E	so,	

The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

■CMS [ = } continuous monitoring system

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

P. L. Bartow Florida Power Corporation

PROPOSED Permit No.: 1030011-002-AV

Facility ID No.: 1030011

# Permit History (for tracking purposes):

-XXX	-009	-009	-009	-008	-007	-006	-005	-004	>	-003	-002	-001	) •	ID No	E.U.
Relocatable Diesel Generator(s)	Flyash Storage Silo w/Baghouse	Flyash Storage Silo w/Baghouse	Flyash Storage Silo w/Baghouse	Gas Turbine Peaking Unit #P-4	Gas Turbine Peaking Unit #P-3	Gas Turbine Peaking Unit #P-2	Gas Turbine Peaking Unit #P-1	Bartow Pipeline Heater Boiler		Bartow Plant Boiler #3	Bartow Plant Boiler #2	Bartow Plant Unit #1	;	Description	
AO09-205952	1030011-006-AC	1030011-005-AC	AO52-232464	AO52-253218	AO52-253217	AO52-253216	AO52-253215	AO52-244478		AO52-216413	AO52-216412	AO52-233149		Permit No.	
		09/04/98	08/30/93	11/23/94	11/23/94	11/23/94	11/23/94	04/18/94		01/27/93	01/26/93	12/29/93	<u>Date</u>	Issue	
03/31/97			08/26/98	11/01/99	11/01/99	11/01/99	11/01/99	04/18/99		09/16/98	09/16/98	12/28/98		<b>Expiration Date</b>	
														Extended Date 1,2	
			09/04/98	01/13/97	01/13/97	01/13/97	01/13/97		02/19/97	08/16/95	02/19/97	02/19/97		Revised Date(s)	

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 40PNL520011

To: Facility ID No.: 1030011

### Notes:

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}

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

#### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

### ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

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

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

#### FINDINGS OF FACT

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

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

- 4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.
- 5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."
- 6. Rule 297.310(7)(z)?., F.A.C., states, "The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision.
- 7. Rule 297.310(7)/2)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 62-210.300(2)(2)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal: a. Did not operate; or, b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours."
- 8. Rule 297.310(7)(z)4., F.A.C., states, "During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for: a. Visible emissions, if there is an applicable standard; t. Each of the following pollutants, if there is an applicable standard; and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant..."
- 9. Rule 297.310(7)(a)5., F.A.C., states. "An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours."
- 10. Rule 297,310(7)(a)6., F.A.C., states, "For fossil fuel steam gener, tors on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

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

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

#### CONCLUSIONS OF LAW

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

#### <u>ORDER</u>

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

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

- 2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;
- 3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;
- 4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.
- 5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

#### PETITION FOR ADMINISTRATIVE REVIEW

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

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120,569 and 120,57 of the Fiorida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120,569 and 120,57 of

the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5,207 of the Florida Administrative Code.

A petition must contain the following information:

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

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

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

A request for mediation must contain the following information:

- (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;
  - (c) A statement of the preliminary agency action;
    - (r) A statement of the relief sought; and
- (a) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

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

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

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

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120,542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

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

The petition must specify the following information:

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

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

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

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

#### RIGHT TO APPEAL

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

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

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Euilding 2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

#### CERTIFICATE OF SERVICE

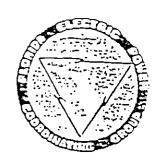
The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this Kink day of March 1997.

Clerk Stamp

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

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FGG) 405 REG STREET, SUITE 100 . (\$13) 289-5644 . FAX (\$13) 289-5646 . TAMPA, FLORIDA 33609-1004

January 28, 1997



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

RECEIVED

RE: Comments Regarding Draft Title V Permits

EUREAU OF AIR REGULATION

Dear Mr. Fancy:

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

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

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

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

- 2. PM Testing on Gar--The FCG understands that the Department may attempt to require annual particulate matter compliance testing while firing natural sas to determine compliance with the 0.1 lb/mmBru emission limit established under Rule 62-295.495(1)(5); F.A.C. The FCG member companies feel strongly that compliance testing for samiculate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while fixing natural gas, it is not recuired under the current permits for these units, and it should not be necessary since natural gas is such a clean field Typically only de mirimis amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department, and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 61-297.620, F.A.C., to allow a visible emissions test to be used in Her of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.
- 3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had been issued by the Department and indicated some concern regarding excess similarity provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

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

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

- 6. Quarterly Reports-The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applied only if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-295.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., cil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.
- Trivial Activities—As you may recall, in May of 1996, the FCG submitted to the Department a list of small, de minimis emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15, 1996, guidance memorandum (DARM-PER/V-15-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1995, list to be "trivial." We would like to discuss a possible resciution of this issue with you and your staff at the January 30 meeting.
- 8. Permit Shielz-The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempt to caveat the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the FCG's comments on the drift Title V permits. We very much appreciate the cooperation we have received from the  $\Gamma$  -parament throughout the

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

Sincerely,

Rich Piper, Chair

FCG Air Subcomminee

Rich Piper

#### Enclosures

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

\$2501

# COMPILATION OF AIR POLLUTANT EMISSION FACTORS

VOLUME I: STATIONARY POINT AND AREA SOURCES

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

January 1995

#### 1.4 Natural Gas Combustion

#### 1.4.1 General<sup>1-2</sup>

Natural gar is one of the major fuels used throughout the country. It is used mainly for inclustrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above &C percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon ditailed, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately \$900 kilocalories per standard cubic mate: (1000 British thermal units per standard cubic foot), usually varying from \$600 to \$501 keal som (900 to \$100 Bru/sof).

#### 1.4.2 Emissions And Controls<sup>3-5</sup>

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

Nitrogen exides (NO<sub>2</sub>) are the major pollutants of concern when burning natural gas. Nitrogen exides emissions depend primarily on the peak temperature within the combustion chamber at well as the turnase-zone exygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO<sub>2</sub> control techniques being applied to natural gas-fired bot err (which result in characteristic changes in emission rates) are low NO<sub>2</sub> burners and five gas rearculate. In Low NO<sub>2</sub> burners reduce NO<sub>3</sub> by accomplishing the combustion process in staget. Staget, protectly delays the combustion process, resulting in a cooler fiame which suppresses NO<sub>2</sub> formation. The three most common types of low NO<sub>2</sub> burners being applied to natural gas-fired bitlets are staged air burners, staged fuel burners, and radiant fiber burners. Nitrogen oxide emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO<sub>2</sub> burners. Other combustion staging techniques which have been applied to natural gas-fired boilers include low excess air, reduced air preheat, and staged combustion (e.g., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO<sub>2</sub> emission rates for these systems.

In a five gar recirculation (FGR) system, a portion of the five gas is recycled from the stack to the burner windhox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO<sub>2</sub> emissions by two mechanisms. The recycled five gas is mulle up of combustion products which are as inerts during combustion of the fuel/air mixture. This additional mass is heated in the combustion zone, thereby lowering the peak fiame tend grature and reducing the amount of NO<sub>2</sub> formed. To a lesser extent, FGR also reduces NO<sub>2</sub> formation by lowering the oxygen concentration in the primary fiame zone. The amount of five gas recirculated is a key operating parameter influencing NO<sub>2</sub> emission rates for these systems. Five gas

recirculation is normally used in combination with low NO, burners. When used in combination, thuse techniques are capable of reducing uncontrolled NO, emissions by 60 to 90 percent.

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

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

The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of NO, control systems such as FGR and low NO, butners reduces combustion efficiency (due to lower combustion temperatures), resulting it higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.41, 1.42, and 1.45.6. For the purposes of developing emission factors, natural gas embustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric Aid English Units). EMISSION FACTORS FOR PARTICULATE MATTER (PM) FROM NATURAL GAS COMPUSTION"

Combustor. Type		Filterable PM <sup>e</sup>		Ü	Condensable PM <sup>4</sup>	<u>.</u>
(Size, 10" Hu/hr Rest Juput) (SCC) <sup>6</sup>	kg/10 <sup>6</sup> m <sup>3</sup> .	711.10° fr	RATING	RATING FR/106 m3	115/10 <sup>6</sup> ft <sup>3</sup>	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	16 - 80	5	<u>ر</u>	GN .	CN	NA
Small industrial boilers (10 - 100) (1:02-006-02)	66	6.2	=	120	7.5	Ω
Commercial hollers (0.3 - < 10) (1:03:006:03)	72	· · · · · · · · · · · · · · · · · · ·	υ	120	7.5	Ü
Residential furnaces (<0.3) (No SCC)	2.8	. 0.18	ų.	180	=	<u>م</u>

emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio pollutant/106 cubic feet natural gas fired. Based on an average hatural gas higher heating value of \$270 keal/m3 (1000 Btu/sef). The References 9-14. All factors represent uncontrolled emissions." Units are kg of pollutant/106 cubic meters natural gas fired and Ib of of the specified heating value to this average heating value. ND = no data. NA = not applicable.

<sup>1</sup> SCC = Source Classification Code,

" Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10). e Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO<sub>2</sub>), NITROGEN OXIDES (NO<sub>2</sub>), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMPUSTION"

				•		-			
Combustor Type		\$03°	*		NO <sub>x</sub> d-	÷	•	,00	
(SCC) <sup>h</sup>	kg/104 m <sup>3</sup>	ווי/וטפ ניין.	RATING	kr/106 m3	16/10 <sup>6</sup> n <sup>3</sup>	RATING	kg/106 m <sup>3</sup>	11/10g tra	RATING
Utility/large Industrial Builers (>100) (1-01-006-01, 1-01-006-04)		-		ii ii 	<u>:</u>				
Uncontrolled	9.6	9.0	٧٠.	8800	รรถโ	~	640	40	~
Controlled - Low NOx burners	9.6	ŋ.n	, Y	:1300	81	<u>-</u>	CN.	: CN	۲×
Controlled - Plue gas recirculation	· 9'6	n.6	٠ ۲	850	) LS .	U.	CIN	CN.	۲X
Small Industrial Boilers (10 - 180) (1-02-006-02)			.:			:	· ·	, <b></b>	
Uncontrolled	9.6	9.0	<	2240	140	. ~	. 260	35	~
Controlled - Law MOx burners	9.6	ŋ.ñ	\ .	1300	. 81	Q	980	19	Q
Controlled - Flue gas sectrestation	9.6	9,0	.` <b>~</b> \	480	30	ņ	590	7٤"	υ
Commercial Boilers (0.3 - < 10) (1-03-006-03)	-		•.			,. •	.".		
Uncontrolled	9'6	9.0		1600	-	=	028	21	U
Controlled - Low MOx burners	9.6	0.6	- V	. 270 °.	4	C.	425	. 27	υ
Controlled - Flue gns recirculation	9.6	9.0	`<.''	SRO	ንር	<u>-</u>	T QN	QN.	٧×
Residential Furnaces (<0.3) (No SCC)				·		•	- -		
Uncontralled	9.6	n.6	<b>&lt;</b>	1500	Þ6	F	640	·6	æ

adural gas fired higher healing value of \$270 keal/m² (1000 Dtu/scf). The emission factors in this table may he converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value, NI = no data. NA = not applicable,

b SCC = Source Classification Code.

<sup>e</sup> Reference 7. Based on average sulfur content of natural gas, 4600 g/106 Nm<sup>4</sup> (2000 gr/106 scf).

₽.

a Table 1.4-2 (cont.).

d References 10, 15-19. Expressed as NO<sub>2</sub>.. For tangentially fired units, use 4400 kg/106 m³ (275 lh/106 m³). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1; Note that NO<sub>x</sub> emissions from controlled boilers will be reduced at low load

e References 9-10,16-18,20-21.

1 Entission factors apply to packaged boilers only.

1/95

Table 1.4-1 Course and English Units). EMISSION FACTORS FOR CARRON DIOXIDE (CO2) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMPUSTION

Condinator Type		°, CO	•		TOC	
(SCC) <sup>h</sup>	kg/i04 m3	11/106 ft3	RATING	kg/106 m <sup>3</sup>	15/106 113	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	»CIN	ON.	NA	286	1.7	U
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E + 06	1.2 E+1.05		928	5.88	U
Commercial boilers (0.3 - < 10) (1-03-006-03)	1.9 13 + 06	1.2 13-1-05	· U	1284	8.01	U
Residential furnaces (No SCC)	2.0 5+06 1.3 5+05	1.3 E+05	Ð	180th	423	

other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value. All factors represent uncontrolled emissions. Units are kg of pollutant/106 cubic meters and 16 of pollutant/106 cubic feet. Based on an average natural gas higher heating value of 8270 kcat/m² (1000 Mu/scf). The emission factors in this table may be converted to NA = not applicable.

b SCC = Source Classification Code,

c References 10,22-23.

d References 9-10, 18.

f ND = no data,

Reference 8: methane comprises 17% of trganic compounds,

Reference 8: methane comprises 52% of organic compounds.

Reference 8: mediane comprises 34% of organic compounds.

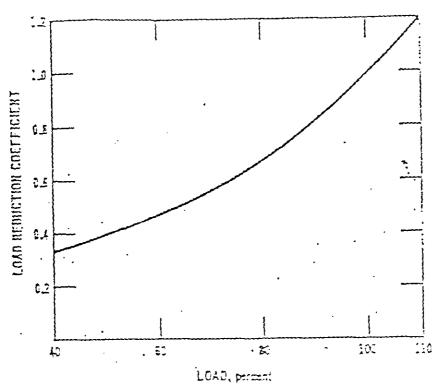
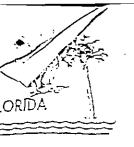


Figure 1.4-1. Load reduction coefficient as a function of boiler load. (Used to determine NO<sub>x</sub> reductions at reduced loads in large boilers.)

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  Independent Third Purty Lource Tests, February 7, 1990



## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

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

Dear Mr. Piper:

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

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

Sincerely,

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

P.E. Administrator

Emissions Monitoring Section Bureau of Air Monitoring and

Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP Pat Comer, FDEP

#### CERTIFICATE OF SERVICE

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

Clerk Stamp

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

<u> Medikus 1/10197</u> Glerk Date

#### Phase II Permit Application

Page 1

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

This submission is: 🙀 New

□ Revised

Compliance

STEP 1 Identify the source by plant name, State, and ORIS code from NADB

Bartow Plant, FL, 634

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

Plan Boiler ID# Unit Will Repowering **New Units** New Units . Hold Allow-Plan ances in Accordance with 40 CFR 72.9(c)(1) Commence Monitor Operation Date Certification Deadline Yes No Yes No 3 Yes Yes Yes Yes Yes Yes

STEP 3 Check the box if the response in column c of Step 2 is "Yes" for any unit For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997

Plant Name (from Step 1) Bartow Plant

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

#### Standard Requirements

#### Permit Requirements.

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

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

#### Monitoring Requirements.

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

#### Sulfur Dioxide Requirements.

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

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

#### Excess Emissions Requirements.

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

#### Recordkeeping and Reporting Requirements.

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

Phase II Permit - Page 3

Plant Name (from Step 1)
Bartow Plant

#### Recordkeeping and Reporting Requirements (cont.)

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

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

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#### Liability.

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

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

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

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

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

which they are not owners or operators or the designated representative.

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

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

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

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

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

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

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

#### Certification

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

Name W. Jeffrey Pardue, C.E.P., Director, Environmental Services Dept.	
Signature Marchine	Date /2/14/95

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Phase II Permit-Page 4 .

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

	•	 		-
AIRS				
				-
FINDS				
		 	 	_

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

#### BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of:

Petition for Reduction in Semiannual Particulate Emissions Compliance Testing, ) OGC File No. 86-1577 Bartow Unit No. 3: Florida Power Corporation

Petitioner.

#### ORDER

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

Bartow Unit No. 3

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since January 26, 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing in GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1985 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from the first annual test. Failure of Bartow Unit No.3 to meet

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

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

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

#### CERTIFICATE OF SERVICE

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> E. Gary Early Assistant General Counsel

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

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

#### THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

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In the matter of:

Petition for Reduction in
Quarterly Particulate
Emissions Compliance Testing

FLORIDA POWER CORPORATION,
Bartow Unit 2,

Petitioner

Petitioner

DOGC File No. 87-1261

OGC File No. 87-1261

#### ORDER

On May 4, 1987, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Matter Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel-fired steam generating unit:

#### BARTOW UNIT 2

Pursuant to Florida Administrative Code Rule

17-2.600(5)(b)l., Petitioner has conducted semi-annual
particulate matter emissions compliance tests. Florida

Administrative Code Rule 17-2.600(5)(b)l. provides that the

Department may reduce the frequency of particulate matter testing
upon a demonstration that the particulate matter standard of 0.1

pounds per million Btu heat input has been regularly met. The
petition and supporting documentation submitted by Petitioner
indicate that, since December 21, 1982, Petitioner has regularly
met the particulate matter standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Matter Emissions Compliance Testing is GRANTED, and that:

1. Petitioner's generating unit Bartow Unit 2 shall be

required to conduct one steady-state particulate matter emissions compliance test annually and one particulate matter emissions compliance test annually under soot blowing conditions.

- 2. Bartow Unit 2 shall be subject to a steady-state visible emissions limiting standard of forty (40) percent opacity (number 2 of the Ringlemann Chart).
- 3. This order supercedes all conflicting conditions relating to frequency of particulate matter emissions compliance testing contained in operating permit A052-56650 for Bartow Unit 2.
- 4. The Department, or its designee, if after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emissions standard in Chapter 17-2 or in a permit issued pursuant to Chapter 17-2 is being violated, may require additional tests for particulate matter emissions pursuant to Florida Administrative Code Rule 17-2.700(2)(b).

Persons whose substantial interests are affected by the Department's above proposed agency action may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahasse, Florida 32399-2400, within twenty-one (21) days of publication of this notice. Failure to file a petition within the twenty-one (21) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section

120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not desire to file a petition may want to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and must be filed with the Hearing Officer if one has been assigned, at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

DONE AND ORDERED this 12th day of October, 1987, in Tallahassee, Florida.

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

10-13-57 Clerk

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

TWACHTMANN Secretary

Twin Towers Office Building 2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-4805



#### Department of **Environmental Protection**

leb Bush Governor

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

David B. Struhs Secretary

August 2, 1999

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

Re:

PROPOSED Title V Permit No.: 1030011-002-AV

Air Construction Permit No.: 1030011-006-AC

**Bartow Plant** 

Dear Mr. Pardue:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Bartow Plant located at Weedon Island, St. Petersburg, Pinellas 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 850/488-1344.

Sincerely,

Bureau of Air Regulation

CHF/s

Enclosures 1

copy furnished to: Kennard Kosky, PE, Golder Associates, Inc. Scott Osbourn, Sr., FPC Peter Hessling, PCDEM Ms. Gracy Danois, USEPA, Region 4 (INTERNET E-mail Memorandum) Mr. Gregg Worley, USEPA, Region 4 (INTERNET E-mail Memorandum)

#### PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 1030011-002-AV

Page 1 of 3

#### I. Public Notice.

An "INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT" to Florida Power Corporation for the Bartow Plant located at Weedon Island, St. Petersburg, Pinellas County was clerked on June 9, 1999. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Neighborhood Times – Northeast Edition on June 27, 1999. The Revised DRAFT Title V Air Operation Permit/Air Construction Permit was available for public inspection at the Pinellas County Department of Environmental Management Air Quality Division in Clearwater and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT" was received on July 9, 1999.

#### II. Public Comment(s).

Comments were received and the DRAFT Title V Operation Permit was changed. The comments were not considered significant enough to reissue the DRAFT Title V Permit and require another Public Notice. Comments were received from two respondents 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. Gary Robbins, Pinellas County Department of Environmental Management Air Quality Division dated July 1, 1999, and received on July 6, 1999.

1.R: The Department acknowledges the comment. The language has been included in Statements of Basis since March 10, 1998 to remove an objection made by EPA, Region 4 on boilers subject to Rule 62-296.405, F.A.C. For clarification, the Statement of Basis will be changed where appropriate, as follows:

From: ----This unit is subject to a steady-state PM emission limit of 0.1 lb/mmBtu, which is effectively equivalent to 0.149 lb/mmBtu because of rounding.----

**To:** ---- This unit is subject to a steady-state PM emission limit of 0.1 lb/mmBtu, which is effectively equivalent to 0.149 lb/mmBtu because of rounding, in accordance with the agreement of March 10, 1998 between EPA, Region 4 and the Department to resolve an objection on this specific issue.----

PROPOSED Permit No.: 1030011-002-AV

Page 2 of 3

**2.R:** The Department agrees with the comment and will change the rule citation of Facility-Wide Specific Condition 2 to "Pinellas County Code, Section 58-178".

- **3.R:** The Department agrees with the comment and will change the area code for Pinellas County in Facility-Wide Specific Condition 10 to "727". Also, the telephone and fax numbers for EPA, Region 4 are changed to "Telephone: 404/562-9155 and Fax: 404/562-9163".
- **4.R:** The Department feels the condition is properly worded and is consistent with the language contained in other permits which allow the firing of used oil. The condition will remain unchanged.
- **5.R:** The Department disagrees with the comment. This is a quote of the rule and the rule does not specify a specific compliance date. The condition will remain unchanged.
- **6.R:** The Department acknowledges the comment. The basis of Specific Condition A.37. is in existing operation permits. These requirements were carried forward in the Title V permit and are appropriately flagged as being not federally enforceable.
- 7.R: The Department agrees with the comment and will change the rule citation of Section III, Subsection A. Specific Condition A.40. to "Pinellas County Code, Section 58-128".
- **8.R:** See response **A.5.R:**, above.
- 9.R: See response A.5.R:, above.
- B. Letter from Mr. Scott Osbourn, Florida Power Corporation dated July 22, 1999, and received on July 26, 1999.
- 1.R: The Department agrees with the comment. The Statement of Basis and the description for Unit 1 are changed, as follows:

From:----Because Unit 1 is oil fired and this unit is capable of meeting the applicable particulate matter and opacity limits in Conditions A.5., A.6., A.7., and A.8. without use of the ESP, the provisions of 40 CFR 64 may not apply [40 CFR 64.2(b)(ii)].---

To:----Because Unit 1 is oil fired and this unit is capable of meeting the applicable particulate matter and opacity limits in Conditions A.5., A.6., A.7., and A.8. without use of the ESP, the provisions of 40 CFR 64 do not apply [40 CFR 64.2(b)(ii)].---

**2.R:** The Department agrees with the comment and "ORDER CORRECTING SCRIVENER'S ERROR: ASP Number 97-B-01" will be added to the referenced attachments on the placard page of the permit.