

*Cindy*



**FPL**

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SUBMITTER'S NAME: \_\_\_\_\_ EXTENSION: \_\_\_\_\_

SEND TO: SCOTT SHEPLAK

COMPANY/DEPARTMENT: FL DEP / OARM

FACSIMILE PHONE NUMBER: 850-922-6979

FROM: SCOTT BUSA

DEPARTMENT: \_\_\_\_\_ TELEPHONE NO: 561 691-2889

DATE: 10/6/97 TIME: 1700

TOTAL PAGES (INCLUDING THIS SHEET) 6

SPECIAL INSTRUCTIONS: Comments on Turkey Point

Draft Permit which we would like to go over on Wednesday (10/8) afternoon. Call me ahead of time if you have any questions.

IF YOU DO NOT RECEIVE THIS MESSAGE CLEARLY

PLEASE CONTACT US AT \_\_\_\_\_ (TELEPHONE NUMBER)

*Scott*

TELECOPY OPERATOR'S NAME: \_\_\_\_\_



FPL

Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420  
700 Universe Boulevard

October 6, 1997

*Gary Anderson  
Mary Polk  
Scott Busa*

Mr. Scott M. Sheplak, P.E.  
State of Florida  
Department of Environmental Protection  
Division of Air Resources Management  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: **Draft Permit No. 0250003-001-AV**  
**FPL Turkey Point Fossil Plant Initial Title V Permit**

Dear Mr. Sheplak:

After reviewing the subject draft Title V permit, FPL identified several issues which we would like to discuss with you in a conference call on October 8, 1997. Thank you for the time to discuss our concerns with you. Listed below are suggested changes to the language in the draft permit.

**Section II. Facility-wide conditions**

No. 10 & 11 This section gives physical locations to send all applicable correspondence. We propose adding an additional option, "If acceptable to the agency, applicable correspondence may also be submitted by electronic mail". Also note that Continuous Emission monitoring data reported under the Acid Rain section is not submitted to US EPA Region 4, but directly to the Acid Rain Division in Washington. We would propose adding "unless otherwise directed" after the addresses listed in these sections.

*CEMS reporting under Part 75 to D.C.*

**Section III. Emission Units and Conditions**

**Subsection A Facility Description:** megawatt descriptions are nominal and do not impose a limit on either unit.

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

**Specific condition A.1. Permitted Capacity** The permitted heat input for both units is incorrect. This should read ... "the maximum heat input shall not exceed 4180 mmBtu / hour while firing natural gas, or 4000 mmBtu / hour while firing fuel oil". FPL identified the inconsistency in heat input rates with "sister" units in the application and provided documentation to correct this.

**Specific condition A.3. Methods of Operation - Fuels** In the first sentence, the list of allowable fuels does not address the use of fuel additives. Accordingly the following language is suggested:

*- what*  
Additives: Fuel additives are authorized to be added to the boiler units as needed to enhance combustion and facilitate furnace cleaning, in a manner consistent with Best Operational

*Exempting MgOH or other magnesium*

Practices. It was noted on our Riviera draft permit that language to this effect was included under permitting notes, section III, subsection A. This is also acceptable to us.

FPL requests the second sentence in Specific condition A.3., "To comply with the sulfur emission limit of 1.1 lb/mmBtu, the sulfur content of the as fired fuel(s) shall not exceed ~~1.0% by weight~~ be removed. Sulfur limits/rates are addressed in later conditions." ✓

### Emission Limitations and Standards

**Specific Condition A.6. Visible Emissions - SootBlowing & Load Change** This title would better describe the activities if changed to read "Visible Emissions - Boiler cleaning & Load Change" which better describes the intent of the allowance. If the Department prefers to keep this description, it is understood that the rule implies more than "sootblowing", covering such activities as air heater wash, dust collector cleaning, hopper cleaning, etc. *full language*

Rule 62-210.700(3), F.A.C. also allows for "Visible emissions above 60% allowed for not more than four 6-minute periods, during the three hour period of excess emissions." We request this addition to the permit. Note that continuous opacity monitors are in operation on these units. ✓ o.k.

**Specific Condition A.9. Sulfur Dioxide** In order to facilitate cofiring, as negotiated with the Cape Canaveral permit, this condition should be changed to read ... "Sulfur dioxide emissions shall not exceed 1.1 lb/mmBtu heat input, as measured by applicable compliance methods. Compliance shall be based on the total heat input from all liquid and gaseous fuels burned. The sulfur dioxide emission limitation shall apply at all times including startup, shutdown, and load change, but shall not apply during malfunction provided best operational practices to minimize emissions are adhered to." ✓

**Specific Condition A.10. Sulfur Dioxide - Sulfur Content** As negotiated with the Cape Canaveral permit, this condition should be eliminated as sulfur emissions are regulated in lb/mmBtu. ✓

**Specific Condition A.11. Nitrogen Oxides** Based on the heat input change in Specific condition A.1, the lb/hr limit for NOx emissions while firing natural gas should be 1672 and while firing fuel oil it should be 2120. ✓

### Monitoring of Operations

**Specific Condition A.15. Sulfur Dioxide** As negotiated with the Cape Canaveral permit, this condition should be changed to read ... "The owner or operator of the emission units shall demonstrate compliance with the sulfur dioxide limit of specific condition A.9 of this permit by the following:

- a. Through the use of a continuous emission monitoring system (CEMS) installed, operated, and maintained in accordance with the quality assurance requirements of 40 CFR 75, adopted and incorporated by reference in Rule 62-204.800, F.A.C. A relative accuracy test audit of the SO<sub>2</sub> CEMS shall be conducted no less than annually. Compliance shall be demonstrated based on a 3-hour rolling average.
- b. In the event the CEMS becomes temporarily inoperable or interrupted, the fuels and the maximum fuel oil to natural gas firing ratio is limited to that which was last used to demonstrate compliance prior to the loss of the CEMS, or the emissions units shall switch to a fuel oil containing a maximum sulfur content of 1.0 %, by weight, or less.

- c. When burning 100 % fuel oil, the emissions unit shall be fired with a fuel oil containing a maximum sulfur content of 1.0 %, by weight, or less.  
[Rule 62-213.440, 62-204.800 and 62-296.405(1)(c)3., F.A.C.] ✓

### Test Methods and Procedures

**Specific Condition A.17. Nitrogen Oxides** In the second sentence, all references to 40 CFR 60 should be eliminated and replaced with 40 CFR 75. The third sentence beginning "This condition shall be amended....." should be removed. CEMS installed at Turkey Point have always been operated in accordance with 40 CFR 75. ✓

**Specific Condition A.20. Particulate Matter** In the sentence beginning "EPA method 3 or 3A with Orsat analysis shall ..." we request "with Orsat analysis" be deleted since method 3 uses an Orsat for O<sub>2</sub>/CO<sub>2</sub> determination and method 3A uses analyzers (not Orsat) for O<sub>2</sub>/CO<sub>2</sub> determination. *Rule*

**Specific Condition A.21. Sulfur Dioxide** As negotiated with the Cape Canaveral permit, this condition should be changed to read ... ~~"The test methods for sulfur dioxide emissions shall be Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee shall demonstrate compliance using CEMS for sulfur dioxide. See specific condition A.15 of this permit.~~  
[Rule 62-213.440, 62-296.405 (1)(c)3. and (1)(e)3., F.A.C.]

**Specific Condition A.22.** This condition should be removed. The alternate method for SO<sub>2</sub> compliance is contained in specific condition A.21. *see A. 15 1/2 limit*

**Specific Condition A.28.(a) 4 b.** We request the Department to remove "5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or" from this condition since their applicability is minimal or non-existent to the Turkey Point plant.

**Specific Condition A.?. Operating Conditions During Testing – PM and VE** This condition should be added based on previous negotiations with the Department. Suggested language (taken from the Riviera Draft permit) is as follows:

Compliance testing during sootblowing and steady-state operation for particulate matter and visible emissions shall be conducted at least once annually, if liquid fuel is fired for more than 400 hours. A visible emissions test shall be conducted during one run of each particulate matter test. Testing shall be conducted as follows:

- a. When Burning Fuel Oil Up to 1.0% Sulfur. When only fuel oil containing less than or equal to 1.0% sulfur, by weight, is fired (or co-fired with natural gas) in an emissions unit, particulate matter and visible emissions tests during sootblowing and steady-state operation shall be performed on such emissions unit while firing solely fuel oil containing at least 90 % of the average sulfur content of the fuel oils fired in the previous 12 month period, except that such test shall not be required to be performed during any year that testing is performed in accordance with specific condition A.?.b.
- b. When burning Fuel Oil Greater Than 1.0% Sulfur. If fuel oil containing greater than 1.0% sulfur, by weight, is co-fired with natural gas in an emissions unit particulate

matter and visible emissions tests during sootblowing and steady-state operation shall be performed as soon as practicable, but in no event more than 60 days after firing such fuel oil, while co-firing such oil with the appropriate proportion of natural gas required to maintain SO2 emissions between 90 to 100% of the SO2 emission limit (corresponding to 0.99 and 1.1 lb/mmBtu heat input). Following successful completion of such PM and VE testing, further PM and VE testing shall not be required during the next 12 months unless fuel oil is fired that contains greater than 0.20% sulfur above the percentage sulfur concentration fired during the most recent co-firing test, additional PM and VE tests shall be performed as soon as practicable, but in no event more than 60 days after firing such higher sulfur fuel oil.

[Rules 62-4.070(3), 62-213.440, 62-296.405(1)(c) 3. and 62-297.310(7)(a)9., F.A.C.]

**Record Keeping and Reporting Requirements**

**Specific Condition A.31.** This condition should be titled **Fuel Records**. In order comply with the above identified changes to specific conditions, current wording should be deleted and replaced as follows:

"The owner or operator shall create and maintain for each emission unit hourly records of the amount of each fuel fired, the ratio of fuel oil to natural gas if co-fired. These records must be of sufficient detail to identify the testing requirements of specific condition A.?, and, when applicable, those requirements of specific condition A.15, paragraphs b and c. Fuel oil heating value and sulfur content shall be determined by taking a daily sample of the fuel oil fired, combining those samples into a composite, and analyzing a representative sample of the composite at least monthly. Additionally, for oil storage tanks which contain, or emission units which only burn fuel oil equal to or less than 1.0% sulfur, by weight, the permittee may use as-shipped or as-received analysis instead. Analysis for sulfur content shall be performed using one of ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s).

[Rules 62-4.070(3), 62-213.410, 62-213.440 and 62-296.405(1)(c)3., F.A.C.]

**Subsection B. Five Diesel Peaking Generators**

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

**Specific Condition B.4. Hours of Operation** FPL requests the following to be added:

"For Emission Unit 003, the hours of operation shall be considered to be less than 400 hours per year per piece of equipment as long as the total fuel consumption for all equipment included in Emission Unit 003 is less than 366,000 gallons per year" *add for all 5 units* *with Pat*

**Specific Condition B.?.** FPL requests the following specific condition to be added to this section:

By this permit, annual and permit renewal compliance testing for visible emissions, NOx, and particulate matter is not required for these emissions units while burning diesel fuel for less than 400 hours per year in each generator or engine. The method of determining 400 hours of operation is identified in **specific condition B.4.**

**Monitoring of Operations**

FPL would like to discuss the elimination of specific condition B.10. through B.22., for the following reasons:

1. While we wish to maintain the possibility to operate these diesel generators more than 400 hours per year, this is not our intent, nor has this ever been the case.
2. Most of the standard test procedures, sampling access, test equipment, etc could not be used on these "stacks" (14' curved pipes, 2' diameter). If testing were required a number of modifications would need to be negotiated anyway.
3. Subsection B adds 7 pages of "clutter" to the permit. Most of these conditions are already in Subsection A and could be referenced instead of repeated in B. We would suggest adding a condition that reads "If and when the operational time of any emergency diesel generator exceeds 400 hours in any fiscal year, then (insert citations from subsection A or F.A.C.) testing procedures apply"

If the Department chooses to keep these conditions, then we request the following changes:

**Specific Condition B.10. Determination of Process Variables**

*Common conditions*

We request paragraph **B.10.(a)** be deleted. Since it is not our intent to operate over 400 hours, nor have these units ever been required, to conduct physical testing, we do not have the capability to monitor all variables necessary for these calculations on an individual unit basis.

*In the event that*  
**Test Methods and Procedures**

**Specific Condition B.12. NOx Emissions** We request the following to be added at the end of this condition:

"The method of determining 400 hours of operation is identified in **specific condition B.4.**"

**Specific Condition B.13.** FPL requests EPA method 7E to be referenced here also.

**Specific Condition B.19.** FPL requests this condition to be deleted since stack sampling facilities do not exist on these units and if they were installed they physically could not meet the standards contained in Appendix SS-1. *When so ok.*

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

FPL requests this addition:

15. Evaporation of spent boiler chemical cleaning solution. *gallons*

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

FPL requests these additions:

- 20,000 gallon No. 2 fuel oil tank
- 25,000 gallon No. 2 fuel oil tank

*for VOC fug PM*

I would like to thank you again for the time you have dedicated to resolving these issues. Please contact me at (561) 691 – 2889 with any questions or if you require further information.

Sincerely,

*Scott A. Busa*  
Scott A. Busa  
Environmental Specialist