

September 18, 1997

RECEIVED

SEP 23 1997

BUREAU OF AIR REGULATION

Mr. W. Douglas Beason, Esquire Assistant General Counsel Office of General Counsel State of Florida Department of Environmental Protection 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

RE: Martin Power Plant

Notice of Intent to Issue Proposed Permit No. 0850001-004-AV - Draft

Dear Mr. Beason:

On August 15, 1997, Florida Power and Light Company (FPL) received the referenced Notice of Intent to Issue Proposed Permit for its Martin Power Plant located in Martin County, Florida. The Notice of Intent was issued by the Department's Tallahassee Office and was signed by C.H. Fancy, P.E., Chief of Bureau of Air Regulation.

FPL has been working in good faith with the Department to identify and resolve outstanding permit issues regarding the referenced facility. The Department and FPL agree that more time is needed to complete the permitting process for this facility. FPL hereby requests, pursuant to Rule 62-103.070, F.A.C., an extension to and including September 30, 1997, in which to file a petition for administrative proceedings regarding the Notice of Intent to Issue the Proposed Air Construction and Air Operating permits. FPL does not request an extension of time in which to public notice the Notice of Intent to Issue the Permits as required under Section 403.815, F.S. and Rule 62-103.150, F.A.C. As good cause for granting the requests for extension of time for filing and public noticing, FPL states the following:

This request is filed simply as a protective measure to avoid waiver of FPL's right to challenge the permit as issued. Granting of this request will not prejudice either party, but will further their mutual interests and likely avoid the need to initiate formal administrative proceedings. FPL is committed to amicably resolving all outstanding issues related to this permit issuance so that the Department's Title V program objectives may be met.

I hereby certify that I have contacted Mr. Scott M. Sheplak, P.E., regarding this request, and he has agreed to this request for extension of time.

# Page 2

Accordingly, I hereby request that you formally extend the time for filing of a petition for administrative proceedings to and including September 30, 1997.

Sincerely,

Richard Piper

Senior Environmental Specialist Florida Power & Light Company

Page 3

cc: Mr. Scott Sheplak, P.E., Tallahassee FDEP

9/23/97

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September 17, 1997

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. 0850001-004-AV
FPL Martin Plant Initial Title V Permit

RECEIVED

SEP 22 1997

BUREAU OF AIR REGULATION

Dear Mr. Sheplak:

After reviewing the subject draft Title V permit, FPL has identified several issues which need to be addressed. Please contact me at your earliest convenience to discuss them.

#### Section I

## **Subsection A Facility Description**

The language in the second paragraph is not quite right; it should read as follows: "Each combined cycle unit has the net capability of **430MW at 95°F** and consists of two combustion turbines....."

Also, steam injection is additionally used for power augmentation, not just in the control of NOx for distillate oil firing.

Section III. Emission Units and Conditions Subsection A - Units 1 and 2

**Specific Condition A.10.** <u>Visible Emissions - Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more [Rule 62-210.700(3), F.A.C.]

Comment: This rule is not applicable to NSPS Subpart D units. An opacity restriction of 20 percent except for one 6-minute period per hour up to 27 percent is the limitation for these units, pursuant to 40 CFR 60.42(a)(2). Although we'd like to have a 60% opacity limit during sootblowing & loadchanging, the Federal Rules preempt this; therefore this condition should be stricken.

**Specific Condition A.12.** <u>Nitrogen Oxides....(b)</u> When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng / J) is determined by proration using the following formula:

$$PS_{NOx} = [x(86) + y(130) / (x+y)]$$

where:

PS<sub>NOx</sub> is the prorated standard for nitrogen oxides when firing different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired;

x = is the percentage of total heat input derived from gaseous fossil fuel; y= is the percentage of total heat input derived from liquid fossil fuel.

The Martin Units 1 and 2 continuous emission monitor for NOx uses this equation for the calculation of NOx emissions, with the exception that the values are expressed in lb / mmBtu rather than in nanograms per joule (ng / J). Therefore, the following change is requested:

$$PS_{NOx} = [x(.20) + y(.30) / (x+y)]$$

where:

 $PS_{NOx}$  is the prorated standard for nitrogen oxides when firing different fuels simultaneously, in <u>Ib / mmBtu</u> heat input derived from all fossil fuels fired;

x = is the percentage of total heat input derived from gaseous fossil fuel; y = is the percentage of total heat input derived from liquid fossil fuel.

# **Specific Condition A.16.**

(1)(I) For sources subject to the opacity standard of 40 CFR 60.42(b)(1), excess emissions are defined as any six minute period during which the average opacity of emissions exceeds 35 percent opacity, except that one six-minute average per hour of up to 42 percent opacity need not be reported.

(1)(ii) For.....reported.

(1)(iii) For....reported.

Comment: These specific conditions only apply to specific fossil fuel fired units identified in the NSPS regulations. They are not applicable to the Martin units and would serve only to confuse future readers of the permit. They should be stricken.

**Subsection B - Description of Emission Units (page 25)** - Please note that steam injection may be employed for power augmentation while firing the combustion turbines on natural gas fuel, as well as for NOx control while firing distillate oil fuel.

**Specific Condition B.3.** - <u>Permitted Capacity</u> - It should be noted that the maximum heat input rate to each combustion turbine is represented by a curve. During high temperature ambient conditions, the inlet air is less dense, and less heat input can be achieved by the unit. Conversely, at low ambient temperatures, the inlet air is more dense; consequently higher heat inputs may be

achieved. Please refer to attached letter dated September 6, 1996 amending the AC and PSD permits for the combustion turbine units.

**Specific Condition B.18**. - This specific condition appears to have been taken verbatim from the Code of Federal Regulations. It should be noted that the Martin combustion turbine units are only required to utilize steam or water injection while firing distillate oil fuel, and not while firing natural gas fuel. Please note that as of this date, the Martin units have not yet fired distillate oil fuel, so there has been no steam-to-fuel ratio established.

**Specific Condition B.19**. - FPL submitted a request for approval of a Customized Fuel Monitoring Schedule on April 28, 1993 which was subsequently deferred by USEPA for approval by FDEP. A copy of supporting documentation is attached to this correspondence as Attachment A. Therefore, FPL requests that Specific Condition B.19. be replaced with the following condition:

"The Martin facility requested approval for and was granted approval to utilize a customized fuel monitoring schedule pursuant to 40 CFR 60.334(b). This schedule is incorporated by reference as Attachment A to this permit."

**Specific Condition B.20**. - In the Customized Fuel Monitoring Schedule, monitoring of the natural gas nitrogen content was not required, pursuant to EPA policy. This specific condition should therefore be clarified to apply only to the firing of distillate oil fuel.

**Specific Condition B.21**. - This condition only applies to steam injection which is only required during distillate oil firing on the Martin units. As stated above, distillate oil has not yet been fired in the Martin units, therefore the water-to-fuel ratio has not yet been established for the combustion turbine units. This specific condition should therefore be clarified to apply only to the firing of distillate oil fuel.

**Specific Condition B.22** - Language in the Specific Condition includes a reference to sulfur dioxide testing which is not required for natural gas firing and should be removed or clarified. In addition, the multiple load testing requirement only applied to the initial testing of the combustion turbines, and not to subsequent annual compliance testing. Please refer to DEP Guidance Document DARM-EM-05, "Rate of Operation During Compliance Testing for Combustion Turbines".

**Specific Condition B.23**. - This condition should be clarified as to which portions apply to natural gas and which apply to distillate oil fuel. The Customized Fuel Monitoring Schedule approved by EPA is the surrogate for the natural gas requirements. Distillate oil fuel, when fired, will be subject to the ASTM methods specified for the analysis of sulfur and nitrogen.

**Specific Condition B.24** - This specific condition is superseded by the Customized Fuel Monitoring Schedule. The language should be changed to reflect that situation.

**Specific Condition B.25** - FPL has constructed several stack tests on each of the combustion turbine units at the Martin facility which Department personnel have witnessed. The sampling platforms and ancillary equipment have been installed and used several times. This Specific Condition is therefore superfluous and should be removed.

**Specific Condition B.26** - Please note that FPL applied for a modification to the Site Certification and PSD permit on September 6, 1996 for the purpose of incorporating an ambient temperature curve to be utilized during compliance testing in accordance with DEP Guidance Document DARM-EM-05, "Rate of Operation During Compliance Testing for Combustion Turbines" (see Attachment B to this correspondence). Reference to the ambient temperature vs. heat input curves should be mentioned in this Specific Condition in order to avoid future confusion regarding the appropriate heat input during compliance testing.

The Department in the same document referenced above (Attachment B) also removed the requirement for annual VOC testing for the combustion turbines. Please revise the specific condition accordingly.

**Specific Condition B.30** - In the PSD permit amendment of September 6, 1996, the Department incorporated language that blends the requirements of Part 60 and Part 75 (see Attachment B to this document).

# **Auxiliary Boiler Specific Conditions**

**Specific Condition C.9 -** This condition appears to be somewhat in conflict with Specific Condition C.8. I would suggest that condition C.8. fulfills the requirements of C.9. so that C.9. is superfluous.

**Specific Condition C.10** - In view of the fact that the operation of the auxiliary boiler is limited to periods of startup and shutdown (see Specific Condition C.3.), this specific condition would not appear to be applicable (we don't take 30 days to startup up a unit, so we'll never achieve a 30-day rolling average).

**Specific Condition C.11 -** The Martin auxiliary boiler may be fired only by either natural gas or distillate oil fuels; therefore 40 CFR 60.42(c)(h)(2) and 40 CFR 60.42(c)(h)(3) do not apply and references to these rules should be stricken.

**Specific Condition C.13** - Compliance and performance test methods and procedures for sulfur dioxide should be negligible for the auxiliary boiler, given that its operation is limited so startup and shutdown and it to date has fired only natural gas fuel. 40 CFR 60.44c does not address natural gas firing. Since the emission rate for SO2 is on the order of 0.01 lb / hour, FPL proposes that no annual testing be required if operational hours are less than 400 hours per year; and that permit renewal testing only be required If operational hours exceed 400 hours over the 5-year permit term. If and when distillate oil fuel is fired in the auxiliary boiler, FPL will utilize the procedures specified in 40 CFR 60.44c(g) or 40 CFR 60.44c(h) to demonstrate compliance with the sulfur dioxide emission limiting standard.

**Specific Condition C.14** - This specific condition will not apply to this emission unit. Although only natural gas has been fired in the auxiliary boiler to date, if and when distillate oil is fired, it will not, by definition, be the only fuel combusted; therefore this condition is inapplicable and should be removed.

**Specific Condition C.19(a) -** The initial startup notifications, federally-enforceable capacity factor limitation and anticipated annual capacity factor are all not applicable. This facility has been operating for several years and the current PSD permit imposes federally-enforceable limits on capacity factor (limited to startup and shutdown). An "emerging technology" is certainly <u>not</u> used to

control SO2 emissions; they are controlled by using primarily natural gas fuel and by limiting the hours of operation of the emission unit.

**Specific Condition C.19(b)** - It is unclear whether 40 CFR 60.42c or 40 CFR 60.43c currently apply to the auxiliary boiler at Martin, since these rules do not mention natural gas as a fuel at all; but rather coal, oil and other fuels. No emission testing has been performed on the emission unit to date. If and when emission testing is performed, test data will be submitted to the Department. There is no CEM on the auxiliary boiler, so the reference to 40 CFR 60 Appendix B should be stricken.

**Specific Condition C.19(d)** - In view of the fact that this emission unit has a federally-enforceable restriction on hours of operation (limited to startup and shutdown), and the emission unit has, to date, only fired natural gas, with an SO<sub>2</sub> emission rate of 0.01 pound per hour, it seems unnecessary to require quarterly reports.

**Specific Condition C.19(e)** - The reference to 40 CFR 60.43c appears to be in error, since this citation refers to the standard for particulate matter emissions rather than sulfur dioxide emissions (the CFR also appears to have this incorrect reference citation). Assuming that 40 CFR 60.42c is the citation that is intended, once again it is unclear as to whether the various restrictions provided in the rule would apply to a natural gas-fired emission unit. In addition, the limitation to operation of this emission unit to hours of startup and shutdown only would also appear to limit the applicability of 30-day average emission rates, etc.. FPL proposes that this entire specific condition be stricken until and unless a request is made by FPL to increase the allowed operating hours to something other than startup and shutdown.

**Specific Condition C.22** - In view of the fact that this emission unit is restricted to operation during startup and shutdown only (historically it has operated 364 hours in 1993 during the initial plant startup, then only an hour per month for testing), and the low emission rates when it does operate, the reporting requirements of this specific condition do not appear to provide any environmental benefit. FPL requests that this specific condition be stricken.

# **Diesel Generator Specific Conditions**

**Specific Condition D.1** - The diesel generator also needs to be tested weekly to ensure that it will function properly when needed to provide emergency power. I suggest the language be modified as follows:

"The diesel generator shall operate only for emergency power generation or for weekly operational testing."

Thank you for your prompt attention to the issues raised in this correspondence. Please do not hesitate to contact me at (561) 691-7058 if I may be of further assistance.

9/20/97 cc: Scott Sheplak

Very truly yours,

Richard Piper

Sr. Environmental Specialist Florida Power & Light Company

# INTEROFFICE MEMORANDUM

Date:

18-Sep-1997 10:12am EST

( Willie Welch@email.fpl.com@PMDF@EPIC

( Gary Driebe@email.fpl.com@PMDF@EPIC6

From:

Rich Piper

( sheplak s@A1@DER )

Rich Piper@email.fpl.com@PMDF@

Dept: Tel No: SUNCOM:

TO: sheplak s

CC: Willie\_Welch

CC: Gary  $\overline{Dr}$ iebe

FPEL

Subject: Martin Draft permit

0850001-004-AU

Scott,

We've discovered one item which we didn't address yesterday during our conversation on the Martin draft permit: Specific Condition D.4.

This condition requires daily sampling of fuel oil fired in the diesel generator. We'd like to propose the following as an alternative:

"Distillate oil fuel fired in the Emergency Diesel Generator shall meet the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78 (or the latest version), "Standard Specification for Fuel Oils"".

This language is taken from the NSPS Subpart Dc rules (which don't apply to this emission unit), but we can meet these specifications based on the data we've obtained to date. Please let me know what you think. Thanks

- Rich



September 10, 1997

Mr. W. Douglas Beason, Esquire Assistant General Counsel Office of General Counsel State of Florida Department of Environmental Protection 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

**RE:** Martin Power Plant

Notice of Intent to Issue Proposed Permit No. 0850001-004-AV - Draft

Dear Mr. Beason:

On August 15, 1997, Florida Power and Light Company (FPL) received the referenced Notice of Intent to Issue Proposed Permit for its Martin Power Plant located in Martin County, Florida. The Notice of Intent was issued by the Department's Tallahassee Office and was signed by C.H. Fancy, P.E., Chief of Bureau of Air Regulation.

FPL has been working in good faith with the Department to identify and resolve outstanding permit issues regarding the referenced facility. The Department and FPL agree that more time is needed to complete the permitting process for this facility. FPL had previously requested and been granted an extention of time to September 12, 1997 in which to file a petition for administrative proceedings regarding the Notice of Intent to Issue the Proposed Air Construction and Air Operating permits. FPL hereby requests, pursuant to Rule 62-103.070, F.A.C., an extension to and including September 19, 1997, in which to file a petition for administrative proceedings regarding the Notice of Intent to Issue the Proposed Air Construction and Air Operating permits. FPL does not request an extension of time in which to public notice the Notice of Intent to Issue the Permits as required under Section 403.815, F.S. and Rule 62-103.150, F.A.C. As good cause for granting the requests for extension of time for filing and public noticing, FPL states the following:

This request is filed simply as a protective measure to avoid waiver of FPL's right to challenge the permit as issued. Granting of this request will not prejudice either party, but will further their mutual interests and likely avoid the need to initiate formal administrative proceedings. FPL is committed to amicably resolving all outstanding issues related to this permit issuance so that the Department's Title V program objectives may be met.

I hereby certify that I have contacted Mr. Scott M. Sheplak, P.E., regarding this request, and he has agreed to this request for extension of time.

# Page 2

Accordingly, I hereby request that you formally extend the time for filing of a petition for administrative proceedings to and including September 19, 1997.

Sincerely,

Richard Piper

Senior Environmental Specialist Florida Power & Light Company

# **BEST AVAILABLE COPY**

Page 3

cc: Mr. Scott Sheplak, P.E., Tallahassee FDEP

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BUREAU OF AIR REGULATION

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# THE PALM BEACH POST

Published Daily and Sunday West Palm Beach, Palm Beach County, Florida

## PROOF OF PUBLICATION

#### STATE OF FLORIDA COUNTY OF PALM BEACH

Before the undersigned authority personally appeared Chris Bull who on oath says that she is Classified Advertising Manager of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice in the matter of Intent to issue Title V in the --- Court, was published in said newspaper in the issues of August 18, 1997.

Affiant further says that the said The Post is a newspaper published at West Palm Beach, in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said ne «spaper.

Sworn to and subscribed before me this 22 day of August A.D. 1997

Personally known XX or Produced Identification Type of Identification Produced



processes, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a tached conditions unless attached conditions unless and to Section 120.57, F.S. Mediation under all 120.57, F.S. Mediation under Section 120.573, F.S., will not section 120.573, F.S., will not action, the section 120.574, F.S., will not action, the section 120.574, F.S., will not action, the section 120.574 person when the s

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111 South waynow 2111 South waynow 21201 Telephone: 904/488-1344 Fax: 904/922-6979 Affected District: Department of Environment Protection Southwest District

Department of Environmental Protection Southeast District 400 North Congress Avenue West Palm Seach, Foridae Talephona: 561/681-6600 Fax: 561/681-6750 Fax: