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August 2, 1994

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PETER C. CUNNINGHAM

Mr. Clair Fancy, Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399

2 (00)

AUG

Bureau of Air Regulation

Re: Florida Power & Light Company

Martin CG/CC Project

Request for Modification of PSD Permit (PSD-FL-146)

Additional Information

Dear Mr. Fancy:

On behalf of Florida Power & Light Company (FPL), I wish to thank you and your staff for taking the time to meet with us last week to discuss the recently submitted request for a revision to the above-referenced PSD permit. That request seeks temporary relief from short-term emission limits for NOx, CO and VOC emissions during "shakedown" periods of up to 60 days following final adjustments and alterations of the dry low NOx combustors (DLN IIs) in the initial combustion turbine (CT) and up to 30 days following final adjustments and alterations in each of the remaining three CTs. In addition, FPL has requested the option to use fuel analysis for mercury emissions in lieu of performing future stack tests to demonstrate compliance with those emission limits.

During our meeting, you and your staff raised a number of questions which we respond to as follows:

- 1. The NSPS limit for the Martin combustion turbines under 40 CFR Subpart GG have been calculated at 108 ppm at 40°F. During the requested shakedown periods, NOx emissions will not exceed this level.
- 2. As to CO and VOC emissions, if the combustors are not operating correctly during the shakedown periods, CO emissions may vary between 50 and 100 ppm. However,

Mr. Clair H. Fancy Bureau of Air Regulation August 2, 1994 Page 2

for a maximum of up to 12 hours per CT, CO emissions may reach 500 ppm as part of short duration (15 - 30 minute) tests to evaluate unit performance during extreme conditions. It is not expected that these increased CO emissions will have any resulting impact on air quality. The initial air quality modeling was based upon coal gas being fired in 8 combined cycled units and showed no impact or exceedances of air quality standards.

- 3. VOC emissions are expected to be approximately 20% of the CO levels during the shakedown periods.
- 4. FPL and GE have developed the attached description of the goals and activities to be undertaken during the shakedown periods for each CT.

The testing to be undertaken is similar to those performance tests done during the initial 180 day shakedown period prior to the initial compliance test. The proposed testing has been tailored to specifically address the problems experienced with the Martin combustion turbines with the objective of returning those units to full load service as promptly as possible.

The initial 60 day shakedown period is expected to begin following the scheduled outage for the first CT in mid to late September, 1994. FPL would welcome attendance by representatives of the Department during this testing and will provide 7 days advance notice to the Department prior to planned commencement of these additional tests. While FPL intends to conclude these tests as quickly as possible, thereby minimizing emissions, FPL wishes to retain the full requested period for each CT to allow ongoing monitoring and additional adjustments to the CTs throughout the requested shakedown periods to determine continuing viability and performance of the redesigned combustors.

Upon successful conclusion of the testing program during these additional periods, FPL will provide notice to the Department of such completion. This would indicate the conclusion of the periods of short term relief and a resumption of the applicability of existing permit emission limits.

FPL also still requests the revision of Specific Condition 10.j. regarding mercury testing to allow fuel sampling and analysis to be used. FPL suggests that language like that contained in the PSD permit (PSD-FL-182) for the Kissimmee Utility Authorities' combined cycle project be substituted. That language at specific Condition 12 provides that "[m]ercury (Hg) shall be tested during initial compliance test using EPA Method 101 (40 CFR 61, Appendix B) or fuel sampling [and] analysis using methods acceptable to the Department." This would allow FPL and the Department to develop an acceptable analysis methods for mercury prior to the performance of future compliance tests for mercury emissions. Please note that although FPL believes the request for alternative compliance methodology is reasonable, it is of secondary importance and should not delay action on the request for the temporary shakedown periods.

Mr. Clair H. Fancy Bureau of Air Regulation August 2, 1994 Page 3

FPL appreciates the Department's attention to this request and its willingness to expedite this matter. Should you or your staff have any further questions regarding this matter or have additional questions based on this submittal, please do not hesitate to contact either Rich Piper at FPL (407-625-7661) or Gary Perko or myself at the number above.

Sincerely,

Douglas S. Roberts

Attorney for

Florida Power & Light Company

DSR/gs Attachment

cc: John Brown (w/attmt.)
Bruce Mitchell (w/attmt.)

Willard Hanks (w/attmt.)
Jim Pennington (w/attmt.)

Hamilton S. Oven (w/attmt.)

Richard T. Donelan (w/attmt.)

FPL Martin Project: Goals of Additional CT Testing Program

FPL has requested temporary relief from certain short-term emission limits in order to conduct additional performance testing of the combustion turbines following final adjustments alterations to the dry low NOx combustors (DLN IIs). The general goals of that testing will be to exercise and tune the operational capabilities of the combustion turbines resulting from the planned hardware modifications to the DLN IIs and other equipment made during the upcoming scheduled outages beginning in September 1994. operational capabilities to be demonstrated establishing an extended CT load range in premixed operation; demonstration of steam power augmentation capability; and evaluation and adjustments of the CTs for dual fuel performance capability. The specific test goals for each of these new capabilities are given below.

- I. Effects of Modifications on DLN II Performance The CTs will be operated over the entire normal premixed operating range (40 to 100% load) to verify that the hardware modifications have no adverse effects on emissions or unit operability. This testing will determine that the planned modifications do not affect unit operation and performance and that the operating problems previously experienced have been resolved. This will include physical evaluation of the units ability to operate on dual fuel; however, no actual firing of the unit on fuel oil will occur during these test periods.
 - If the physical modifications have any effects on unit performance, adjustments will be made to the fuel splits and the control constants, as explained below, to account for those effects.
 - These tests will be performed both at steady state loads as well as during transient operations when the unit is ramping between different load levels.
- II. Extended Low Load Premixed Operation This testing will seek to map out CT emissions and establish a stable combustor operating range from 40 to 60% load.
 - The CTs will be operated at different load levels between 40 and 60%, as well as ramping between these load levels, to make adjustments to the fuel feeds to 4 different points in the combustors during natural gas firing. The objective is to identify the load-related points that minimize NOx, CO and VOC emissions as well as avoiding continued CT dynamics.

 Following manual adjustment for these points, the units automated control constants will be revised to allow the computerized unit control system to make these adjustments automatically in the future.

III. Steam Power Augmentation Testing of CT operation for both physical performance and compliance with permitted emission limits for NOx, CO and VOC will be conducted with steam augmentation occurring from zero up to maximum steam injection levels. Based on these operation tests, adjustments will be made to the control constants and fuel split schedules as discussed above to maintain emissions at permitted levels and to control combustor stability and dynamics.

Upon successful completion of these test goals, FPL will continue to monitor each CT for the remainder of the extended shakedown period to determine the viability of the adjustments and alterations made to the combustors. If needed, additional adjustments will be made to the combustors, during which time emissions may occur at levels above currently permitted levels but within those levels authorized by the requested PSD permit revision.

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July 26, 1994

Mrg 7/27 KRISTIN M. CONROY

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Mr. Clair Fancy, Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399

Florida Power & Light Company

Martin CG/CC Project

PSD-FL-146, Martin County

RECEIVED

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Bureau of Air, Regulation

Dear Mr. Fancy:

CARLOS ALVAREZ

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On behalf of Florida Power & Light Company I am writing to Department of Environmental that the (Department) make certain minor amendments to the above-referenced PSD permit. The Department issued the permit on June 3, 1991. On July 19, 1993, the U.S. Environmental Protection Agency issued an administrative change to the permit. The proposed revised and additional conditions FPL is proposing are contained in the This parallels a separate request for attachment to this letter. modification of site certification for the Project filed with the Department, pursuant to the Florida Power Plant Siting Act. check for \$10,000 has been submitted to the FDEP Siting Office as part of the modification request.

In accordance with Specific Condition 9, the FPL Martin Units 3 and 4 employ new "dry low NOx" combustor technology as the Best Available Control Technology (BACT) for control of nitrogen oxide (NOx) emissions during the firing of natural gas in the combustion turbines (CTs). The CT units represent the first commercial application of the new General Electric (GE) second generation dry low NOx combustors, known as DLN IIs, on the large GE advanced 7FA As with many such new technologies, transferring the DLN II control equipment from operation in the factory to full size and full scale operating conditions at the Martin site has revealed certain unanticipated difficulties during initial operation. Currently, operation of the CTs has been constrained by intense acoustical vibration that affects unit performance and stability at various operating loads (both high and low heat input rates). In its present configuration, the CTs are capable of very high thermodynamic efficiency and very low emissions performance over a Mr. Clair Fancy July 26, 1994 Page 2

narrow operating range on natural gas. However, the expected equipment life of the system is questionable because of higher than expected acoustical vibrations. After undertaking diligent efforts to resolve these problems, FPL has installed interim alterations to the DLN combustors and has demonstrated compliance with applicable emission limits for natural gas firing during earlier initial compliance testing conducted in accordance with the PSD permit and associated power plant site certification for the project. The units have not yet been fired or tested on oil.

Although interim alterations have proven successful, FPL must install permanent alterations to the DLN II combustors to insure long term combustor integrity. A new combustor design has been developed which is aimed at broadening the "emission compliance" operating range while demonstrating operation using both fuel oil with steam injection and power augmentation within established emission limits. This refined design is expected to improve the parts life of the combustion system through reduced dynamics while achieving NOx, CO and VOC emissions on both permitted fuels at existing limits.

Combustors reflecting the final design configuration are expected to be installed in one of the four CTs during a September, 1994, outage. To allow for evaluation and testing of these combustors, FPL is requesting temporary relief under the PSD permit from certain emission limits specified in Specific Condition 4 during an initial "shakedown" period of up to 60 days after installation of the final combustor design in the initial CT.

Assuming the final combustors perform satisfactorily, installation of the redesigned combustors would proceed on the other 3 CTs, with a need for a more limited period of 30 days relief per CT from the same emission limits in Specific Condition 4 for shakedown of those units. Although FPL is requesting temporary relief from short term emission limits specified for NOx, carbon monoxide (CO), and volatile organic compounds (VOCs) in Specific Condition 4, relief from applicable New Source Performance Standards (NSPS) limits will not be required. All installation and testing activities will be done in compliance with the existing permit conditions as modified by the proposed revised conditions presented below.

As noted above, FPL has already conducted initial stack tests on each CT demonstrating compliance with the emission limits applicable during natural gas operation. Pursuant to Specific Condition 10 j, the initial compliance tests for mercury emissions were performed using EPA Method 101 (40 CFR 60, Appendix B). Because mercury emission rates are fuel-specific, fuel sampling and analysis can be used in lieu of stack testing to reliably determine the mercury emission rates of the CTs. Moreover, because the

Mr. Clair Fancy July 26, 1994 Page 3

Martin CTs share single fuel sources, for natural gas and fuel oil, use of fuel sampling and analysis to determine mercury emission rates would eliminate the need for costly stack tests on each individual CT and thereby significantly reduce the costs of compliance testing. Accordingly, FPL requests revision of Specific Condition 10 j to authorize use of fuel sampling and analysis, in lieu of Method 101 stack test, to demonstrate compliance with mercury emission limits in the future.

Your attention to this request is appreciated. Since the shakedown period of these redesigned combustors is proposed to occur in September, 1994, FPL desires to expedite this request to the greatest extent possible. Accordingly, your prompt attention and processing of this request would be greatly appreciated. Should there be any matters in which we may assist in accomplishing this, or if there are questions you or your staff may have, please do not hesitate to contact me.

Peter'C. Cunningham

PCC/qs

Preston Lewis cc:

Hamilton S. Oven

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GSSign. Clan

FPL Martin CG/CC Project PSD-FL-146

- 1. Specific Condition 4 is revised as follows:
 - 4. The maximum allowable emissions from each CT in accordance with the BACT determination, shall not exceed the following, at 40°F (except during periods of startup and shutdown as prescribed by Note e. below):

Pollu- tant	Fuel	Basis	Units lb/hr/CT	Emission I 3 & 4 TPY	imitations ^d Unit lb/hr/CT	:s 5 & 6 TPY*
NOx	Gas	25 ppmvd @ 15% O ₂ f	177 <u>f</u>	comb 3108	177	comb3108
	Oil	65 ppmvd @ 15% O ₂	461	tot	461	tot
	CG	42 ppmvd @ 15% O ₂	392	6868	392	6868
VOC ^b	Gas	1.6 ppmvd ^f	3 ^f	comb 57	3	comb 57
	Oil	6 ppmvd	11	tot	11	tot
	CG	9 ppmvd	21.4	375	21.4	375
СО	Gas	30 ppmvď	94.3 ^f	comb 871	94.3	comb 871
	Oil	33 ppmvd	105.8	tot	105.8	tot
	CG	33 ppmvd	134	2311	134	2311
			* * *			

- To allow for evaluation and testing of alterations to the dry low NOx combustor (DLN) design, these limitations shall not apply during a sixty (60) day period following installation of the final DLN design configuration in the initial CT and shall not apply during a thirty (30) day period per CT following installation of the final DLN design in each of the remaining three CTs.
- 2. Specific Condition 10 is revised as follows:
 - 10. Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels. The stack test for each turbine shall be performed within 10% of the maximum heat rate input for the tested operating temperature. Annual (A) compliance tests shall be performed on each Combustion Turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with the November 2, 1989, version of 40 CFR 60 Appendix A:

* * *

j. Mercury (Hg) shall be tested using EPA Method 101
 (40 CFR 61, Appendix B) or fuel sampling and
 analysis (I)

Other DER approved methods may be used for compliance testing after prior Departmental approval.

HOPPING BOYD GREEN & SAMS

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July 25, 1994

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RICHARD S. BRIGHTMAN PETER C. CUNNINGHAM

> Hamilton S. Oven, P.E. Department of Environmental Protection 3900 Commonwealth Blvd., Suite 953 Tallahassee, FL 32399

> > Re:

Request for Modification of Site Certification

FPL Martin CG/CC Project - PA 89-27

Dear Mr. Oven:

On behalf of Florida Power & Light Company, we are submitting the enclosed proposed modification of site certification for the FPL Martin CG/CC project. The modification request is submitted pursuant to Section 403.516(1)(b), F.S. A check in the amount of \$10,000, payable to the Department is enclosed, as required by Rule 17-17.293(1)(c), F.A.C. Copies of this proposed modification are also being distributed to the parties identified on the service list and to those listed below.

The modification request addresses separate issues involving air emissions and water issues for the plant. FPL desires to obtain final approval for the requested modification related to air emissions as expeditiously as possible. These issues involve emissions associated with the evaluation and testing of the dry low NOx combustors for the combustion turbines. Because this activity will occur in the near future, FPL proposes that that portion of the request be expedited to the greatest extent possible. The remaining requested modification can be processed in accordance with the Agency's normal procedures. Should you or any Agency staff have any questions about this matter, please feel free to contact us.

Due to your absence on vacation at this time, this request is being sent directly to the Department's siting attorney and to various agency staff, as identified below, in order to assure expedited review of this request.

Hamilton S. Oven, P.E. July 25, 1994 Page 2

We will be in touch with your office in the near future to discuss this matter further. In the interim, should you have any questions please feel free to contact either one of us.

Sincerely,

Peter C. Cunningham Douglas S. Roberts

DSR/gs Encls.

cc: Richard T. Donelan, Jr., Esq., FDEP Al Rushanan, FDEP Raisa Neginsky, FDEP Clair Fancy, FDEP



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May 31, 1994

JUN 0 7 1994

Bureau of Air Regulation FPLJEN-DER-170-94-10

Mr. Clair Fancy, Chief **Bureau of Air Regulation** Department of Environmental Protection 3900 Commonwealth Blvd. Tallahassee, FL 32399

RE:

Martin CC/CG Project

PSD-FL-146

Condition of Certification PA-89-27

Units 4A & 4B Continuous Emission Monitor Certification

Dear Mr. Fancy

In compliance with 40 CFR 60, Appendix F, FPL is hereby notifying the Department that Martin Units 4A and 4B will begin certification of the continuous emission monitoring system as prescribed in Permit PSD-FL-146 Condition 13 and Condition 12 of PA-89-27. The CEMS certification contractor is scheduled to begin the certification on June 15 and June 16, 1994, respectively.

Please call Glenn Keeling at (407) 625-7603 if you have any questions.

Sincerely,

Wayne C. Ondler
Environmental Licensing Project Manager

CC:

Jewel Harper, EPA H. S. Oven, DEP/TAL Tom Tittle, DEP/WPB

M. Harley

Proston



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Florida Power & Light Company, P.O. Box 088801, North Palm Beach, FL 33408-8801

March 11, 1994

Mr. Clair Fancy, Chief Bureau of Air Regulation Department of Environmental Protection 3900 Commonwealth Blvd. Tallahassee, FL 32399

RE:

Martin CC/CG Project

PSD-FL-146

Initial Fire of Unit 4A

In compliance with 40 CFR 60.7(a)(3), FPL is hereby notifying the Department that Martin Unit 4A initially fired the CT on March 1, 1994.

Please call Glenn Keeling at (407) 625-7603 if you have any questions.

Sincerely,

Wayne C. Ondler

Environmental Licensing Project Manager

Environmental Affairs

CC: Jewel Harper, EPA

Wayne Ondler

H. S. Oven, DEP/TAL Tom Tittle, DEP/WPB



BY FACSIMILE

January 21, 1994

July, Coly, Florida Power & Light Company, P. Box 088801, North Palp Beach, FL 23492 8801

JAN 2 4 1994

Bureau of Air Regulation

FPL-JEN-DEP 170-94-01

Mr. Eric Peterson Department of Environmental Protection - SED 1900 S. Congress Avenue, Suite A West Palm Beach, FL 33406

RE: FPL Martin Project

Schedule for Initial Compliance Test

This letter serves to update previous correspondence on the initial compliance tests for Martin Units 3A and 3B Prevention of Significant Deterioration Permit (PSD FL-146) and Power Plant Site Certification (PA 89-27). In accordance with Provision 17 of PSD FL-146, FPL is providing written 15 day notice of the initial compliance testing to be performed during the week of February 7-11, 1994. Since the unit is currently capable of firing only natural gas until November 1994, this testing will be for only those pollutants permitted for natural gas.

In previous correspondence, FPL has notified the Department that the units face certain operational constraints because of intense acoustical vibration that affects unit performance and integrity. As these constraints are being resolved in computerized and laboratory analysis, the units have operated acceptably at a somewhat restricted load range. Should unit operation during this testing be limited to less than ninety percent of permitted heat input, FPL understands that the units can operate up to 110% of tested load and that compliance testing at higher loads is acceptable at a later date.

Oil firing is not scheduled to commence until Fall, 1994, after which compliance tests for oil firing will be performed.

Please call Glenn Keeling at (407) 625-7603 if you have any questions.

Sincerely,

Wayne C. Ondler

Environmental Licensing Project Manager

Ven Caleng for

cc:

Jim Pennington, DEP TLH Preston Lewis, DEP TLH Hamilton S. Oven, DEP TLH

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Florida Power & Light Company, P.O. Box 088801, North Palm Beach, FL 33408-8801

RECEIVED

December 20, 1993

DEC 27 1993

PMG-170-93-201

Bureau of Air Regulation

Mr. Preston Lewis
Bureau of Air Regulation
Department of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399

RE:

FPL Martin Project NOx Control System Dry Low NOx (DLN 2)

Dear Mr. Lewis:

As a follow up to the meeting of October 28, 1993, this letter serves as our mid-December update on the status of the NOx control systems for the FPL Martin Project.

Our extensive site and laboratory testing conducted from November 15, 1993 through December 3, 1993 has been successful in characterizing the dynamic and emissions performance of the existing DLN 2 system. Modifications made in October, based on our original tests conducted in August and September, have significantly reduced the pulsation problems (dynamics) outlined in previous correspondence and discussed with you in our meeting. We have also discovered a minor fuel leakage problem in the combustor which is causing slightly higher than acceptable NOx emissions after only a few hours of operation. The source of this problem has been narrowed to the fuel nozzle assemblies and metal seals contained therein. GE and FPL are currently working to solve this problem. We are confident that solving the fuel leakage problem will result in a reliable interim DLN 2 combustion system until the final design can be developed. As previously indicated, this interim DLN system will operate without oil firing or power augmentation (peak) capabilities.

The interim DLN system is being installed in December of 1993 and will be tested and evaluated, culminating in the February 1994 emission compliance testing. As our plans mature, we will advise the Department of the actual test dates as provided under the PSD permit and Department rules. FPL will continue to operate Unit 3 in accordance with our current permit requirements.

We are continuing to follow the plan we discussed in our meeting with you. Our current focus is to develop a final DLN 2 system which will provide long term flexible operation and continuous emission compliance over an acceptable operating range. Our current plan is to install the final DLN 2 system in the fourth quarter of 1994, at which time a subsequent emission compliance test will be conducted. In addition, as we discussed in October and in recent correspondence, work on Unit 4 is moving forward in preparation for initial firing. We will continue to update you on a regular as required basis. Please advise Glenn Keeling at (407) 625-7603 or Bill Yeager at the plant at (407) 597-7108 if additional information is required or if you have specific questions.

Sincerely,

Wayne C. Ondler

Environmental Licensing Project Manager

arethe Romain

cc: Jim Pennington DEP Tallahassee Tom Tittle - DEP SED

WCO/LGK/lms/PMG-170-93-201



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365 MAY 8 2 1003

DEPARTMENT OF ENVIRONMENTAL PROTECTION

4APT-AEB

CERTIFIED MAIL RETURN RECEIPT REQUESTED RECEIVED

750 07 1993

Mr. Wayne C. Ondler

DEC -7 1993

OFFICE OF THE SECRETARY

Environmental Licensing Project Manager Environmental Affairs Department

Division of Air Resources Management Florida Power & Light Company

P. O. Box 088801

North Palm Beach, Florida 33408-8901

Martin County CG/CC Project (PSD-FL-146)

Dear Mr. Ondler:

In response to your February 2 and May 19, 1993, letters requesting an administrative change to the conditions of the Prevention of Significant Deterioration permit (PSD-FL-146) issued to Florida Power & Light Company (FPL) on May 31, 1991, for the Martin County CG/CC project, EPA issued a revised permit on July 19, 1993. Specific Conditions 5 and 7 of the permit were revised to authorize: a) a different auxiliary boiler and diesel generator, both with smaller capacity but with slightly increased emission rates though overall lower total emissions; and, b) an additional two hours during cold startup periods for the combustion turbines.

Pursuant to the existing partial delegation agreement with the State of Florida, the Florida Department of Environmental Protection (FDEP) conducted the technical and administrative portions of reviewing the request, including recommending specific changes to permit conditions. EPA incorporated the suggested changes into the revised permit; however, the phrase "periodic maintenance testing" was inadvertently omitted from the final version of Specific Condition No. 7. The purpose of this letter is to correctly revise Specific Condition No. 7 to read exactly as recommended by DEP and approved by EPA.

Based on the foregoing, it is determined that the proposed revision to the Specific Condition No. 7 of PSD-FL-146 is acceptable and will not result in the increase in permitted annual emissions of any pollutant subject to the PSD regulations. As an administrative change, this revision will not require additional public participation procedures.

Authority to construct a stationary source was granted for the Martin County Coal Gasification and Combined Cycle Project, subject to the conditions contained in the permit to construct on May 31, 1991. This administrative change to PSD-FL-146 does not alter the commence construction deadline for Units 3 and 4. This authority to construct is based solely on the requirements of 40 CFR §52.21, the federal regulations governing significant deterioration of air quality, and in no way affects the approvals under other federal or State regulatory authorities. Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, may subject Florida Power & Light Company to an enforcement action.

Any questions concerning this administrative permit revision may be directed to Mr. Winston A. Smith, Director; Air, Pesticides, and Toxics Management Division at (404) 347-3043.

Sincerely,

Schule M Tolini

Patrick M. Tobin Acting Regional Administrator

Enclosure

cc: C. H. Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental
Protection
Twin Toward Office Building

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

PSD-FL-146

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. §7470 et seq., and the regulations promulgated thereunder at 40 C.F.R. §52.21, as amended at 45 Fed. Reg. 52676, 52735-41 (August 7, 1980),

> Florida Power & Light Company P. O. Box 088801 North Palm Beach, Florida 33408-8801

is hereby authorized to construct/modify a stationary source, specifically the Martin County Coal Gasification and Combined Cycle Project, at the following location:

> Florida Power & Light Company Martin County Power Generation Facility SR 710; 5 miles NW of Indiantown Indiantown, Florida

UTM Coordinates: 542.87 km E, 2992.43 km N

Upon completion of this authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached Specific Conditions (Part I) and General Conditions (Part II).

The revisions to this permit shall become effective on the date signed below.

If construction does not commence within 18 months after May 31, 1991, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and Local law.

Patrick M. Tobin

Acting Regional Administrator

Strick M Tolsin

November 22, 1993
Date Signed

The Specific Conditions of federal permit PSD-FL-146 shall be modified as follows:

Specific Condition No. 7

FROM:

Auxiliary steam boilers and diesel generators shall operate only during startup and shutdown, and for emergency power generation, respectively. NO_x emissions for the auxiliary steam boilers shall not exceed 0.1 lbs/mmBTU for natural gas firing or 0.3 lbs/mmBTU for natural gas firing or for oil firing. NO_x emissions for the diesel generators shall not exceed 15.0 grams/hp-hr.

TO:

Auxiliary steam boilers and diesel generators shall operate only during startup and shutdown, periodic maintenance testing, and for emergency power generation, respectively. NO_x emissions for the auxiliary steam boilers shall not exceed 0.3 lbs/mmBTU for natural gas firing or oil firing. NO_x emissions for the diesel generators shall not exceed 15.0 grams/hp-hr.

Pathy.

INTEROFFICE MEMORANDUM

Date: 10-Dec-1993 10:02am EST

From: Mike Harley TAL

HARLEY M

Dept: Air Resources Managemen

Tel No: 904/488-1344

SUNCOM:

TO: Hamilton Buck Oven TAL (OVEN_H)

CC: Clair Fancy TAL (FANCY_C)
CC: John Brown TAL (BROWN_J)
CC: Preston Lewis TAL (LEWIS_P)
CC: Martin Costello TAL (COSTELLO_M)

Subject: FP&L MARTIN-TEST METHODS INITIAL COMPLIANCE TESTING

We have reviewed FP&L's October 5 (received November 23) request to deviate from the sampling procedures required by the power plant site certification for FP&L Martin. Some of alternate procedures that are included in the above referenced request were part of a similar request (involving EPA Methods 5, 8, and 20) for the Lauderdale facility. The request for the Lauderdale facility was filed in December of 1992 and amended in March of 1993. In April, we asked FP&L to support the request with simultaneous sampling data. To date, we have not received the requested information. Our comments are as follows:

EPA Method 20

This is similar to the request to modify to EPA Method 20 for the Lauderdale project which was filed in December of 1992 and revised in March of 1993. In order to obtain approval of this request or the previous Lauderdale request, the company will need to support the request with simultaneous sampling data from the affected facility.

If FP&L is wants to avoid the requested simultaneous EPA Method 20 sampling, we would be willing to allow the same option that was allowed for the turbines at the Florida Power Corporation facility in DeBary in our letter of July 1, 1993. Florida Power Corporation requested approval to use the eight most convenient points in lieu of the eight points where oxygen concentrations were the lowest.

When EPA Method 3A is used to perform the oxygen stratification measurements required by EPA Method 20, the following criteria must be used to determine the existence of stratification. If the difference between the highest measured oxygen concentration and the lowest measured oxygen concentration in the duct is less than 0.4%, it may be assumed that stratification does not exist. Where stratification does not exist, the eight most convenient points may be selected.

EPA Method 18

EPA Method 25A was developed for the measurement of saturated hydrocarbon compounds (i.e., alkanes, alkenes, and arenes). EPA Method 25A is not really suited to the measurement of VOC emissions from combustion sources, because it does not have a uniform response for partially oxidized compounds. It is sometimes selected when concentrations of volatile organic compounds are below the minimum detectable limit (50 ppmv) for EPA Method 25. If the projected VOC concentrations are above 50ppmv and the product of the volumetric concentrations of CO2 and water vapor is less than 100, EPA Method 25 would be the most appropriate method. For combustion turbines, EPA Method 18 may be more appropriate than EPA Method 25A. FP&L should perform simultaneous EPA Method 18 and 25A testing for volatile organic compounds during the initial compliance test. If there is not a substantial difference in the results of the test, then an alternate sampling procedure may be approved and the site certification amended to allow the use of EPA Method 25A in lieu of EPA 18. But, the company will ultimately need to settle on a single method of testing for compliance.

EPA Method 101

First, the company needs to settle on the use of either EPA Method 101 or EPA Method 101A. The two procedures are somewhat different in terms of range, precision, and interfering agents. EPA Method 101 will measure substantially lower concentrations with greater precision than EPA Method 101A. For EPA Method 101 sampling, the presence of sulfur dioxide can result in premature depletion of the iodine monochloride sampling solution. For EPA Method 101A sampling, the presence of excessive amounts of oxidizable organic matter can cause premature depletion of the potassium permanganate sampling solution.

Since the combustion gases from FP&L Martin will contain a certain amount of sulfur dioxide, it would be advisable to use EPA Method 101A for the initial test. If no mercury is detected in the stack, then a test could be performed using EPA Method 101. I don't think the option to perform either method should exist beyond the initial compliance test. The existence of an equal option to use either EPA Method 101 or EPA Method 101A could potentially complicate any future enforcement actions.

EPA Methods 5 & 8

This request is also similar to the one which was filed for the Lauderdale project in December of 1992 and revised in March of 1993. In order to obtain approval of this request or the previous Lauderdale request, the company will need to support the request with data gathered using simultaneous sampling (EPA Method 5B and EPA Method 8 in

series) from each affected source.

When a source is required to determine compliance with separate emission limits for particulate and sulfuric acid mist, the appropriate test method for particulate is EPA Method 5B.



FPL-JEN-DEP-170-93-50

November 5, 1993

Preston Lewis
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

RE:

FPL Martin Project; NOx Control Systems

Dear Preston:

We appreciated the opportunity to meet with you and Jim Pennington to update the Department on the status of the Martin Project and to discuss the preliminary difficulties being encountered with the nitrogen oxide control systems for the combined cycle units. We believe that these problems will be resolved in the next several months to allow the units to begin operation as originally planned. These problems are to be expected in utilizing new, emerging pollution control technologies like the dry low-NOx combustors for the Martin Units. Our efforts with GE to address this problem are continuing in earnest.

In the coming weeks, FPL will keep the Department advised on the progress toward overcoming these operational difficulties. In mid-December, 1993, we would like to convene a followup meeting with you and the Department's staff to brief you on the progress being made on this matter. For your reference, a schedule of the activities FPL and GE will be undertaking to correct these difficulties is enclosed.

Should you have any questions concerning this schedule, please do not hesitate to contact me at 407-625-7603.

Sincerely,

Sterr Kelling/ms/

Encls.

cc: Jim Pennington, DEP/Tlh.

Lou Valcarenghi, DEP/SED

Tom Tittle, DEP/SED Jim Keener, FPL Wayne Ondler, FPL

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(c) Primavera Systems, Inc.		- IARI										·



November 5, 1993

Mr. Eric Peterson

RECEIV FEL-DEN-DEP-170-93-49

NOV 15 1993

Division of Air Resources Management

RE:

FPL Martin Project;

1900 S. Congress Ave. Suite A West Palm Beach, FL 33406

Schedule for Initial Compliance Test

Department of Environmental Protection - SED

Dear Mr. Peterson:

Florida Power & Light Company wishes to follow up on the letter sent to you October 27, 1993 concerning the dates for the initial compliance tests for the FPL Martin Units 3 and 4.

Based upon recent discussions with Jim Pennington of the Department's Air compliance and Enforcement Section and our earlier letter, the startup of Unit 3A commenced on August 23, 1993 and of Unit 3B on September 8, 1993, these were the dates upon which the units were first fired on natural gas following the pre-startup activities required to ready the units for service.

Calculating from those dates, the compliance tests are required to be conducted prior to February 19, 1994 for Unit 3A, and March 7, 1994 for Unit 3B. Under current project schedules, compliance tests are to be performed between December 8 and December 31, 1993. Subsequent notices will be provided to the Department no later than 30 days before those test dates.

This letter serves to modify formally the prior correspondence from FPL dated June 2, 1993 and July 2, 1993, to reflect that unit startup on natural gas occurred for Unit 3A on August 23, 1993 and for Unit 3B on September 8, 1993. Martin Unit 3 has not yet been fired on oil.

This also serves to modify formally FPL's October 13, 1993, letter to Clair fancy concerning the dates of the initial firing of Units 4A and 4B. Unit 4 is currently planned to commence startup in late January, 1994. FPL will provide notice of the startup of Unit 4 at a later date.

Should you have any questions concerning this matter, please call Glenn Keeling at 407/625-7603.

Sincerely,

Wayne Ondler

Environmental Licensing Project Manager

Wayne Onller

CC:

Clair Fancy, DEP, Bureau of Air Resources Preston Lewis, DEP, Bureau of Air Resources

INTEROFFICE MEMORANDUM

Date:

27-Oct-1993 02:32pm EST

From:

Preston Lewis TAL

904/488-1344

LEWIS P

Dept:

Air Resources Management

Tel No:

SUNCOM:

Thomas Tittle TO:

TITTLE T)

Jim Pennington TO: TAL (PENNINGTON J)

CC: John Brown TAL (BROWN J)

cc: Cindy Fancy TAL (FANCY CA)

Subject: FPL Martin mtg 10/28

A meeting has been scheduled in the BAR conference room for 2:00pm Thursday, 10/28/93 to discuss compliance issues relating to the Martin Project (see your copy of ltr 10/21/93 Roberts to Lewis). FPL and GE plan to provide te project task and schedule planned prior to the 2/94 compliance test.

Please standby for a telephone call so that you can be kept informed. Could you please give me a telephone number to call you?

Do Rhone a Kilophene

Box Ken

telecon

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET
POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500 FAX (904) 224-8551 FAX (904) 681-2964

October 21, 1993

C ALLEN CULP, JR.
JONATHAN S. FOX
JAMES C. GOODLETT
GARY K. HUNTER JR.
DALANA W. JOHNSON
RICHARD W. MOORE
ANGELA R. MORRISON
MARIBEL N. NICHOLSON
GARY V. PERKO
MICHAEL P. PETROVICH
DOUGLAS S. ROBERTS
KRISTIN C. RUBIN
JULIE ROME STEINMEYER

OF COUNSEL W. ROBERT FOKES

Preston Lewis
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Fla.

PSD FL- 146;

Unit Start Up and Compliance Tests

RE: FPL Martin Project;

Dear Preston:

CARLOS ALVAREZ

JAMES S. ALVES BRIAN H. BIBEAU KATHLEEN BLIZZARD

WILLIAM L. BOYD, IV

RALPH A. DEMEO THOMAS M. DEROSE

RICHARD D. MELSON WILLIAM D. PRESTON CAROLYN S. RAEPPLE

GARY P. SAMS ROBERT P. SMITH CHERYL G. STUART

WILLIAM H. GREEN WADE L. HOPPING FRANK E. MATTHEWS

ELIZABETH C. BOWMAN

RICHARD S. BRIGHTMAN PETER C. CUNNINGHAM

committed of the state of the s

To follow up our recent telephone conference regarding the above referenced project, I am writing on behalf of Florida Power & Light Co. (FPL) to brief the Department on recent developments concerning the nitrogen oxide (NOx) control systems for the new FPL Martin combined cycle units. As you are aware, these new units are employing new dry low NOx combustor technology as the best available control technology (BACT) to control NOx emissions during firing of natural gas in the combustion turbines (CTs), which comprise a portion of the combined cycle units. These units represent the first commercial application of the new General Electric (GE) second generation dry low NOx combustors, known as DLN 2, on the large GE advanced 7FA CTs. Each of the two Martin units is comprised of two combustion turbines and two heat recovery steam generators and a single stream turbine.

As with many such new technologies, transferring the NOx control equipment for the new Martin CTs from operation in the factory combustion test stand to full size and full operating conditions at the FPL Martin site has revealed certain unanticipated difficulties during initial operation of the combustors in the units. In general, pulsations have been experienced in the combustors on each CT at various operating loads of the units (both at high and low heat input rates). The pulsations are created by CT dynamics at different operating load levels, adversely affecting the flame stability and combustor hardware integrity during continuous operation. Although FPL has been able to operate the unit at permitted NOx emission levels at intermediate load with the DLN 2 system in operation, the CT dynamics were in excess of

(m) 3 TESTBY 2/21/94 (180 days often start rip) Stant-up problem - noise inside Combitan (Dynamics) on DLN Z modefy The Harbane by 12/1/93 a) measurements will be taken and The PSI, NOx, CO, and UHC chart hall be ne-platted Hear to meet the lest on unt 3 However, of the date is missed as Wainer will be submitted with DLN2 (prototype) being proteguation since this technology is Vory impatent to Hondo's strating to Continue the NO, reduction on new Consonstans Using Consonstranteshousques Cenil H Est. Complain East 3/15/94 in latest May 94 tete by fall to chave will be node for oil and lest will follow.

Preston Lewis October 21, 1993 Page 2

acceptable operating levels. In order to maintain combustor integrity, the CTs are currently being fired during preoperational shakedown in an alternate DLN 2 system mode.

FPL and GE are undertaking diligent efforts to resolve these problems both on a temporary and a permanent basis. Certain short term adjustments and alterations could be made to the CTs and combustors that should allow the units to meet the emission limits at intermediate loads on a continuous basis. These combustor changes are currently being identified by GE and may include installing Helmholtz resonators and two-stage fuel nozzles that are expected to minimize the pulsations in the combustors. Other or different adjustments may be used to dampen the effects of the CT-generated pulsations on the DLN 2 combustors. The fact that GE has been successful in resolving initial operating difficulties with similar combustors on earlier model GE 7F CTs strongly suggests the initial difficulties experienced with the combustors on the Martin units can be resolved.

FPL expects that the interim alterations will be installed and demonstrated to be successful by the deadline of February 21, 1994 for the initial compliance tests while burning natural gas on CT 3A and of March 7, 1994 for CT 3B on natural gas, as required under 40 CFR, Part 60, Subparts A and GG.¹ These initial compliance test dates are based upon unit startup dates of August 23, 1993 for CT 3A and of September 8, 1994 for CT 3B. Although the expected temporary alterations are still being identified, designed and installed on the units,

Fuel oil has not yet been fired in either unit and will not be fired on oil for several months. Pursuant to recent Department and USEPA guidance, initial compliance tests during oil firing will not be required until 180 days after oil is first fired in a unit.

As part of final construction of Unit 3, steam blows were performed on both units during the summer of 1993 as part of the completion of construction to clean the steam tubes in the HRSGs. The steam was generated by firing the CTs and operating the HRSGs, which required engaging the steam turbine/generator set in order to place a load on the combined cycle unit required for completion of the steam blow. While this process produced a minimal amount of electricity, the intent of the steam blows was to complete construction of Unit 3 and to determine mechanical acceptance of the units. The units were not fired at that time for purposes of producing electricity.

After the steam blows, Unit 3 was shut down for 7 weeks. CT 3A then was fired on natural gas on August 23, 1993, with the steam turbine being engaged on August 25, 1993, an event that resulted in production of electricity for distribution to the electrical grid. CT 3B was first fired on natural gas on September 8, 1993 and provided steam to the steam turbine the same day. Based on USEPA guidance in the Instructional Manual for Clarification of Startup in Source Categories Affected by New Source Performance Standards, (USEPA, Office of Enforcement, Oct. 1979), "[f]or fossil fuel-fired steam generators, startup is best defined as the first time steam is produced by the boiler and used. . . in the case of an electrical utility, to drive turbines that produce electricity." Under this analysis, the event of producing electricity did not occur until August 23, 1993 when the CT 3A was fired following completion of construction.

- If a wainer is required Con me consider a "testing agreement" initeal of made a part of the wainer - When the oil Conductor modifieding are made this may cause the gas are made this may cause the gas NO, feels to be out of limits and Alguine some adjustments. Preston Lewis October 21, 1993 Page 3

FPL expects these will be completed by the dates for the initial compliance tests. FPL expects to then conduct the initial compliance tests on Unit 3 by the scheduled deadlines.

These short term adjustments to Unit 3 are expected to allow operation of the DLN 2 system for up to 9 months at the permitted emission levels. During this period after the compliance test, FPL plans to operate Unit 3 at those load levels at which compliance with the NOx emission limits is demonstrated during the compliance test or by the emissions monitoring system on the unit.²

Permanent alterations to the combustors are expected to be developed by GE and available for installation within nine months after the initial compliance tests on Unit 3. At this time, FPL plans to install and test these longterm alterations on Martin Unit 4, which is identical to Unit 3. Unit 4 is nearing completion of construction. Prior to FPL's acceptance of Unit 4 from the construction contractor, a steam blow and mechanical acceptance of that unit are necessary to demonstrate satisfactory completion of the construction contract. However, FPL does not intend to commence the startup of Unit 4 immediately following the completion of construction. Instead, FPL will leave Unit 4 shut down following the completion of construction until the longterm alterations to the combustors are developed, manufactured and ready to be installed. The final design verification testing for the permanent adjustments will be undertaken as part of the startup process for Unit 4. The initial compliance test on Unit 4 will then be used to demonstrate the satisfactory performance of these permanent alterations.

Following the satisfactory performance of the permanent alterations to the DLN 2 combustors in operation on Unit 4, those same alterations will then be made to Unit 3. This will require Unit 3 to be shutdown and then tested for a short period of time, of up to 30 days, to determine the satisfactory performance of the permanent alterations on the Unit 3 combustors. This short term demonstration period on Unit 3 may require prior Departmental approval of possible excess emissions above permitted levels for this short period of operation of Unit 3. At this time, FPL is uncertain if such approval will in fact will be needed but wishes to advise the Department at this time of that possibility.

FPL requests that a meeting be arranged with the Department in the near future to discuss this situation and reach concurrence with the Department on this course of action. At this time, we do not believe any approval or action by the Department is required concerning this matter. However, FPL would like to consult with the Department directly on this situation. If possible, FPL would like to arrange this meeting for sometime within the next week in your Tallahassee

² The units will be equipped with continuous emission monitors that will allow ongoing monitoring of compliance with emission limits.

Preston Lewis October 21, 1993 Page 4

offices. I will contact you in the next few days to set a mutually convenient date for such a meeting. In the interim, should you have any questions, please call me.

Sincerely,

Douglas S. Roberts

cc: Clair Fancy, DEP
Jim Pennington, DEP
Hamilton S. Oven, DEP
Tom Tittle, DEP SE District
Jim Keener, FPL/PMG
Wayne Ondler, FPL/ENV

UNIT 3

6/01/93STBAMBLOW 3A		8/23/93 START CT 3A	A AFTER STEAM BLOW RESTORATION		11/1/93 START INSTALLATION OF MODIFIED COMBUSTORS ON CT 3A				
		8/30/93 RE	ESTART CT-3A/ROLL AND SYNC STEAM	TURBINE	11/22/93 START TESTING MODIFIED COMBUSTOR ON CT 3A				
	6/12/93 STEAMBLOW 3B		9/8/93 START C1 38 AFTER STEAM B	LOW RESTORATION 02/93 FINISH DLN 2 TESTING	12/15 Carling MODIFIED COMBUSTOR ON CT 3A				
					12/08/93 END TESTING MODIFIED COMBUSTOR ON CT 38				
		9/4/5	,03 START DUN 2 TESTING	SHAKE	12/02/93 START TESTING MODIFIED COMBUSTOR ON CT 3B				
				10/5/93 START COMBINED CYCLE T	11/15/93 START INSTALLATION OF MODIFIED COMBUSTORS ON CT 38 E TESTING				

01/01/94 RELEASE NEW COMBUSTORS FOR MANUFACTURING	WE UNIT 4					
02/15/94 NEW COMBUSTOR DELIVER	RY/INSTALLATION ON UNIT 4A					
	03/15/94 BEGIN DUN 2 TESTING ON UNIT 4A					
	05/01/94 UNIT 4 TRAIL OPERATION					
	04/15/94 BEGIN FINAL PERFORMANCE TESTING					
03/08/5	P4 BEGIN STARTUP OF UNIT 4A					



Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell Secretary

October 21, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Wayne C. Ondler Licensing Project Manager Florida Power & Light Company P. O. Box 088801 North Palm Beach, FL 33408-8801

Dear Mr. Ondler:

Re: FPL Martin CC/CG Project PSD Permit FL-146 PA 89-27

Temporary Change in Auxiliary Boiler Operation

The auxiliary boiler authorized by the referenced permit is allowed to operate during startup. Therefore, operation of this boiler between October 15, 1993, and February 28, 1993, to support the startup, including the system testing phase of construction, as requested in your October 7, 1993, letter is in compliance with this permit.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/WH/bjb

cc: Isidore Goldman, SED

Buck Oven, PPC Patrick Tobin, EPA 7. Auxiliary Steam Boilers and Diesel Generators shall operate only during startup and shutdown, periodic maintenance testing, and for emergency power generation, respectively. NO_X emissions for the auxiliary boiler shall not exceed 0.3 0.1 lb/MMBtu for natural gas firing or 0.2-1b/MMBtu for oil firing. NO_X emissions for the diesel generators shall not exceed 15.0 12.0 grams/hp-hr.

Sulfur dioxide emissions limitations for the auxiliary steam boilers and diesel generators are established by firing natural gas or limiting the light distillate fuel oil's sulfur content to 0.3% on an annual basis.

Any party to this Order has the right to seek judicial review of the Order pursuant to section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 that the Final Order is filed with the Department of Environmental Regulation.

DONE AND ENTERED this 11 day of August, 1993 in Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to \$120.52 Fibrida Statutes, with the designated Department Clerk, receipt of which is hereby acknow-

lodged.

Clock

Date

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

VIRGINIA B. WETHERELL

Secretary

Marjory Stoneman Douglas Bldg. 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (904) 488-4805



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TO



October 7, 1993

Mr Tom Tittle
Southeast District Office
Department of Environmental Protection
1900 S. Congress Ave., Suite A
West Palm Beach, FL 33406

MUs.

Re:

FPL Martin CC/CG Project PSD Permit FL-146 PA 89-27

Temporary Change in Auxiliary Boiler Operation -

Dear Mr. Tittle:

The Martin CC/CG Project which was permitted under the Power Plant Siting Act (PA 89-27) and PSD Permit (PSD-FL-146) is currently under construction. The Project has an auxiliary boiler which is used normally during Unit startup and hot stand by to generate steam seals in the steam turbine until the heat recovery steam generator can generate sufficient steam to maintain the steam seals. The Conditions of Certification (IIA7) and the PSD Permit defines the operating parameters of the auxiliary boiler as "Auxiliary Steam Boiler and Diesel Generators shall operate only during startup and shutdown, periodic maintenance testing and for emergency power generation respectively".

FPL is hereby requesting a temporary change in the operation of the auxiliary boiler in accordance with the Conditions of Certification and the PSD Permit which require that any change in the method of operation, fuels or equipment be submitted to the Department for approval. FPL requests that between October 15, 1993 and February 28, 1994 that the auxiliary boiler be allowed to operate as necessary to support the startup and system testing phase of construction.

The site total air emissions will remain below the total permitted air emissions. As of October 6, the combined operation of CT 3A and 3B were less than 750 hours out of a possible 5856 hours (both CTs were first fired in early June). First fire of CT 4A and 4B will not occur until mid November and will be operated on a limited basis during the startup testing phase. The auxiliary boiler is permitted to emitted 4.89 lb/hr of NO, compared to the 177 lb/hr from each CT. Therefore, there will be no increase emissions at the site due to the additional hours of operation of the auxiliary boiler.

Your attention to this matter is appreciated by FPL and if you have any questions please call Glenn Keeling at 625-7603.

Sincerely,

Wayne C. Ondier

Licensing Project Manager

Wayne Ordla



October 13, 1993

Mr. Clair Fancy, Chief
Bureau of Air Regulation
State of Florida
Department of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

RE: Martin CC/CG Project

PSD-FL-145

Anticipated Start-up

Dear Mr. Fancy:

In compliance with 40 CFR 60.7(a)(2), Florida Power & Light Company (FPL) is hereby notifying the Department that Martin Unit 4A is expected to initially fire the CT on November 15, 1993. Also, Martin Unit 4B is expected to initially fire the CT on November 22, 1993.

Please call me at 407-625-7603 if you have any questions.

Sincerely,

L. Glenn Keeling

Senior Environmental Specialist

L. Dlenn Keeling

cc: Stephanie Brooks - DEP/WPB

Jewel Harper - EPA

Buck Oven - DEP/Tallahassee

RECEIVED

OCT 19 1993

Division of Air Resources Management

LGK/lms/Martin.DEP