STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Ms. Carine Bullock, Production Manager Florida Power and Light Company, Martin Power Plant P.O. Box 176 Indiantown, FL 34956-0176 Project No. 0850001-011-AC Air Permit No. PSD-FL-286A Simple Cycle Peaking Units 8A/8B Revised Condition, Excess Emissions Martin County, Florida

Enclosed is Final Air Permit No. PSD-FL-286A, which modifies Condition No. 18 related to excess emissions for simple cycle Units 8A/8B at the Martin Power Plant. As noted in the Final Determination (attached), only minor changes were made to correct typographical errors. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3/20/03 to the persons listed:

Ms. Carine Bullock, FPL *

Mr. John Hampp, FPL

Mr. Edward Preast, FPL

Mr. Tom Tittle, SED

Mr. Gregg Worley, EPA Region 4

Mr. John Bunyak, NPS

Clerk Stamp

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

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY		
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X CLAND Manager Addressee B. Received by (Printed Name) C. Date of Delivery AMM Manager C. Date of Delivery		
Article Addressed to:	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No		
Carine Bullock Production Manager Florida Power & Light Company, Martin F			
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PO Box 176 [Indiantown, FL 34956-0176	3. Service Type Certified Mail		
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FINAL DETERMINATION

PERMITTEE

Ms. Carine Bullock, Production Manager Florida Power and Light Company, Martin Power Plant P.O. Box 176 Indiantown, FL 34956-0176

PERMITTING AUTHORITY

Florida Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation New Source Review Section 2600 Blair Stone Road, MS #5505 Tallahassee, Florida, 32399-2400

PROJECT

Project No. 0850001-011-AC Air Permit No. PSD-FL-286A

The condition is revised similar to that of Rule 62-210.700, F.A.C., which is the basis for the requirement. The revised condition also includes a 1-hour period for excess emissions due to a switch from oil to gas. Such a fuel switch is typically complete in less than 25 minutes and results in reduced emissions once the unit is firing natural gas.

NOTICE, PUBLICATION, AND ADMINISTRATIVE PROCEDURES

The Department distributed an "Intent to Issue Permit" package on January 24, 2003. The applicant published the "Public Notice of Intent to Issue" in The Stuart News on February 20, 2003. The Department received the proof of publication on February 26, 2003. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received.

CONCLUSION

The final action of the Department is to issue the permit with only minor revisions to correct typographical errors.



Department of Environmental Protection

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

David B. Struhs Secretary

PERMITTEE:

Florida Power and Light Company P.O. Box 176 Indiantown, FL 34956

Authorized Representative:

John M. Lindsay, Plant General Manager

Project No. 0850001-011-AC Permit No. PSD-FL-286A FPL Martin Power Plant Facility ID No. 0850001 SIC No. 4911

Expires: December 1, 2003

PROJECT AND LOCATION

Issued on July 21, 2000, original Permit No. PSD-FL-286 authorized the installation of two simple cycle, 170 MW gas turbines. The units were constructed at the existing FPL Martin Power Plant located in the western part of unincorporated Martin County approximately seven miles north of Indiantown on State Road 710. The UTM coordinates are Zone 17, 543.1 km E, 2992.9 km N and the map coordinates are Latitude 27° 03' 13", Longitude 80° 33' 46". Construction is complete and the units are in operation. On July 9, 2002, the expiration date was extended to provide the necessary time to submit a complete application for a Title V air operation permit. This modification revises Specific Condition No. 18 (excess emissions) in Section III for gas turbine Units 8A and 8B. It also extends the expiration date to provide a valid permit for modification and to allow additional time to complete the application for a concurrent Title V permit revision.

APPLICABLE REQUIREMENTS

This air pollution construction permit is issued under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. All of the original conditions of Permit No. PSD-FL-286 issued on July 21, 2000 are incorporated by reference into this air construction permit modification except for the changes made to this placard page and Specific Condition No. 18 on revised Page 11 (attached). No new construction is authorized. A copy of the original PSD permit is attached as part of this permit.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A. Terminology

Appendix BD. Department's BACT Determinations

Appendix E. Emissions Standards Summary

Appendix GC. Construction Permit General Conditions

Appendix GG. NSPS Subpart GG Requirements for Gas Turbines

Appendix XS. CEMS Excess Emissions Report

Howard L. Rhodes, Director

Division of Air Resources Management

Devision Date)

"More Protection, Less Process"

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

COMBUSTION TURBINES

- 18. Excess Emissions Allowed: For each combustion turbine, excess NOx and visible emissions during startup, shutdown, and documented malfunction shall be allowed, providing:
 - (a) Operators employ best operational practices to minimize the amount and duration of excess emissions.
 - (b) Operation below 50% of base load shall not exceed 120 minutes during any calendar day.
 - (c) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to ten, 6-minute observation periods during any calendar day. Data for each observation period shall be exclusive for the ten periods.
 - (d) Excess emissions resulting from startup, shutdown, or documented malfunctions shall not exceed two hours in any 24-hour period. Excess emissions resulting from oil-to-gas fuel switching shall not exceed 1 hour in any 24-hour period.
 - (e) The NOx CEMS shall monitor and record NOx emissions during all periods of operation including startup, shutdown, malfunction, and fuel switching. For excess NOx emissions due to malfunction, the permittee shall notify the Compliance Authority within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.
 - (f) If the permittee provides at least 5 days advance notice prior to tuning in accordance with the manufacturer's recommendations, up to three 1-hour monitoring averages may be excluded from the continuous NOx compliance demonstration for each gas turbine due to excess NOx emissions resulting from tuning. {Permitting Note: It is expected that no more than two tuning sessions would occur each year.}

{Permitting Note: This condition was revised in accordance with PSD-FL-286A, Project No. 0850001-011-AC.} [Design; Rule 62-210.700(1) and (5); Rule 62-4.130, F.A.C.]

EMISSIONS PERFORMANCE TESTING

- 19. <u>Sampling Facilities</u>: The permittee shall design the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rules 62-4.070 and 62-204.800, F.A.C.; 40 CFR 60.40a(b)]
- 20. <u>Test Methods</u>: Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.
 - (a) EPA Method 5 or 17 Determination of Particulate Matter Emissions from Stationary Sources
 - (b) EPA Method 7E Determination of Nitrogen Oxide Emissions from Stationary Sources
 - (c) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources
 - (d) EPA Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources
 - (e) EPA Method 20 Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
 - (f) EPA Methods 25 or 25A Determination of Volatile Organic Concentrations {Note: EPA Method 18 may be conducted to account for the non-regulated methane fraction of the measured VOC emissions.}

No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C. [40 CFR 60, Appendix A; Rule 62-204.800, F.A.C.]

21. <u>Initial Tests Required</u>: Initial performance tests to demonstrate compliance with each emission standard for normal gas firing, gas firing with power augmentation, gas firing with high temperature peaking, and backup distillate oil firing shall be conducted within 60 days after achieving the maximum production rate,

Note: A full copy of the original Permit No. PSD-FL-286 was provided to each of the parties listed in the Final Notice. Additional copies may be requested form the Department by calling 850/488-0114 or writing to:

Mailing Address

New Source Review Section Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS#5505 Tallahassee, FL 32399-2400

Physical Address

New Source Review Section Bureau of Air Regulation Florida Department of Environmental Protection 111 South Magnolia Drive, Suite #4 Tallahassee, FL 32301

Florida Department of Environmental Protection

TO:

Howard Rhodes, Division of Air Resources Management

THRU:

Trina Vielhauer, Bureau of Air Regulation

Al Linero, New Source Review Section

FROM:

Jeff Koerner, New Source Review Section

DATE:

March 20, 2003

SUBJECT:

Project No. 0850001-011-AC

Air Permit No. PSD-FL-286A

FPL Martin Power Plant, Simple Cycle Peaking Units 8A and 8B

Revised Specific Condition No. 18, Excess Emissions

The Final Permit for this project is attached for your approval and signature, which revises Condition No. 18 in Permit No. PSD-FL-286A. The condition is revised similar to that of Rule 62-210.700, F.A.C., which is the basis for the requirement. The revised condition also includes a 1-hour period for excess emissions due to a switch from oil to gas. Such a fuel switch is typically complete in less than 25 minutes and results in reduced emissions once the unit is firing natural gas.

I recommend your approval and signature.

Attachments