

Department of Environmental Protection

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

David B. Struhs Secretary

March 1, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

John Hampp, Environmental Specialist Florida Power & Light Company P.O. Box 14000 Juno Beach, FL 33408

Re: FPL Martin Power Plant

R&D Project: Cold Air Bypass on Fossil Fuel Stem Unit No. 1

ARMS ID No. 0850001

Dear Mr. Hampp:

This letter responds to your original request received by the Department on January 28, 2000 to install and test a cold air bypass on Unit No. 1 at FPL's Martin Power Plant in March of this year. The Department received additional information from FPL on February 18, 2000 regarding this request.

Background

Florida Power & Light Company (FPL) operates a steam electric plant located approximately six miles west of Indiantown in Martin County, Florida. Unit No. 1 at this plant is a steam generator that fires natural gas and/or fuel oil to produce a maximum 863 MW of electricity. Unit No. 1 is equipped with low-NOx burners, multi-cyclones, fly ash re-injection, and flue gas re-circulation. The flue gas re-circulation system is designed to reduce NOx emissions by injecting flue gas with a low oxygen content from the economizer outlet into the windbox. In general, flue gas injection is only effective when the unit is operated at loads greater than 300 MW.

Current Request

FPL proposes a project to utilize a portion of the flue gas injection ductwork as a cold air bypass around the air preheater. The project consists of installing a new control damper and a new air inlet damper. The new bypass would increase the cold end temperature of the preheater above the dew point temperature of sulfuric acid mist. This would prevent emissions of SO₃ from condensing and combining with water to form H₂SO₄. Benefits of the project should include:

- Reduction in acid attack on the metal components of the air preheater and flue surfaces;
- Reduction in costs for ductwork typically needed for a new cold air bypass system;
- Decrease in opacity during load ramp ups by reducing the accumulation of condensed products in the air preheater typically driven off during this period; and
- Potential decrease in wastewater from less frequent maintenance washes for the air preheater.

The project is designed so that the dampers can be adjusted to allow the cold air bypass at low loads (< 300 MW) and readjusted for flue gas injection to control NOx emissions at high loads (> 300 MW). If the cold

John Hampp, FPL Martin Plant – Cold Air Bypass Page 2 of 4

air bypass is not effective, the project's design allows for a complete return of Unit No. 1 prior to any of the changes.

Comments

Staff from the Department's Southeast District Office met with FPL to discuss this project. Staff from the Bureau of Air Regulation discussed the proposed project with the Air Compliance Assurance Manager of the Southeast District Office. The District Office commented that it did not appear likely that the project would increase emissions. Unit No. 1 is equipped with continuous monitors for NOx, SO2, and opacity. Monitoring data could be used to document any changes.

Conclusion

The Department has reviewed the available information regarding FPL's request and authorizes installation of the cold air bypass as described. To provide reasonable assurance that no emissions increases occurred as a result of this project, FPL shall submit the following additional information.

1. Within seven (7) days of completing installation of the proposed cold air bypass, FPL shall notify the following Department contacts:

Tom Tittle, Environmental Manager

Air Resources Section

DEP Southeast District Office

P.O. Box 15425

West Palm Beach, FL 33416-5425

Jeff Koerner, New Source Review Section DARM – Bureau of Air Regulation

Florida Department of Environmental Protection

2600 Blair Stone Road, MS #5505

Tallahassee, FL 32399-2400

The notification shall include a description of the completed installation, a detailed description of the operation, and a proposed schedule for monitoring and evaluating the results.

- 2. The cold air bypass shall not be used at loads above 300 MW without prior approval from the Department.
- 3. Within 180 days of completing installation of the cold air bypass, FPL shall submit a written summary to the Department's contacts summarizing the data collected from the continuous NOx, SO2, and opacity monitors for representative 30-day period. For each day the cold air bypass was used, the summary shall include the number of operational hours, the average NOx emissions, the average SO2 emissions, the average opacity, the average cold end temperature of the air preheater, and the highest load (MW) during bypass. For comparison purposes, a similar summary of this data shall be provided for a period of time when the cold air bypass is not in use. FPL shall certify whether or not an emissions increase has occurred.
- 4. After completing the evaluation of the cold air bypass, FPL shall notify the Department of its intent to either continue use of the cold air bypass or removal of the system. In the event that FPL continues use of the cold air bypass, FPL shall provide the Department with the latest instructions regarding best practices for startup and shutdown operation, which incorporates operation of the cold air bypass system.

A copy of this letter shall be filed with all current air permits and shall become parts of those permits. This decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the

John Hampp, FPL Martin Plant – Cold Air Bypass Page 3 of 4

public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

John Hampp, FPL Martin Plant – Cold Air Bypass Page 4 of 4

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this decision 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 days after this order is filed with the clerk of the Department.

If you have any questions regarding this letter, please contact Jeff Koerner at 850/488-0114.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director

Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this agency action was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3-2-20 to the person(s) listed:

Mr. John Hampp, FPL*

Mr. Tom Tittle, Southeast District Office DEP

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.

(Clerk)

(Date)

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)
Self to Mark Street & Jumber Countried Fee
Special Delivery Fee
Special Delivery Fee
Special Delivery Fee
Whom & Date Delivered Whom, Date, & Addressee's Address

Return Receipt Showing to Whom, Date, & Addressee's Address

Postmark or Date

Total Postage & Fees

Postmark or Date

Return Receipt Showing to Whom, Date, & Addressee's Address

Postmark or Date

Do School Date & Addressee's Address

Postmark or Date

Do School Date

the right of the return address			
ne over top of envelope to	Fold at lii		
SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we can return this card to you. Attach this form to the front of the mailpiece, or on the back if space does not permit. Write "Return Receipt Requested" on the mailpiece below the article number. The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. Addressee's Address 2. Restricted Delivery Consult postmaster for fee.	
3. Article Addressed 19: Mr. John Hampp, En. Spec. F.P. J. L. P.D. BOX 14000 June Beh, Fl	4b. Service Register Express Return Re	Type ed Mail ceipt for Merchandise	Certified Insured COD
5 Received By: (Print Name)	7. Date of Delivery 8. Addressee's Address (Only if requested and fee is paid)		
6. Signatule: (Addressee or Agent) X PS Form 3811 December 1994	595-98-B-0229	Domestic Retu	rn Receipt