

Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

November 25, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Laura Crouch  
Manager, Air Programs – Environmental, Health and Safety  
Tampa Electric Company  
Post Office Box 111  
Tampa, Florida 33601

Re: Biomass Test Burn – Bahia Grass  
Polk Power Station Unit 1  
ARMS Permit No. 1050233-013-AC

Dear Ms. Crouch:

The Department has reviewed the request from Tampa Electric Company received on October 27, 2003 concerning the gasification of a blend of coal/petcoke and biomass (Bahia grass) in your IGCC unit located at the Polk Power Station, Polk County, Florida.

You are hereby authorized to conduct performance tests on these emission units while gasifying and combusting a blend of up to 5 percent biomass by weight (Bahia grass) for pollutants described herein, for a period not to exceed 28 days, and within 45 days from the first day biomass is gasified. Test results must include a material balance for each unique blend of fuels. All conditions of existing permits related to air pollution emission limits and control equipment remain in force during the test burn. This temporary authorization shall expire on or before April 30, 2004.

The performance tests shall be conducted in order to gather data regarding pollutant emissions, any operation limitations on gasifying a blend of up to 5 percent by weight biomass, to measure syngas characteristics and to evaluate slag content from the gasifier. Unless otherwise specified, all test results shall be sent to the Department's Bureau of Air Regulation within 30 days of completion of the tests. Upon any requested change to allow permanent combustion of fuels not currently permitted for these emission units, the Department will evaluate the establishment of new or additional permit conditions resulting from either increases or improvements in emission quality or quantity.

The performance tests shall be subject to the following conditions:

1. The permittee shall notify the DEP Southwest District and the Bureau of Air Regulation upon the initial receipt of biomass, one day prior to gasifying biomass and 7 days prior to commencement of any stack performance testing. A written final report shall be submitted to these offices within 45 days of completion of the last day that biomass is gasified.
2. Biomass shall be continuously fed so as to maintain a homogenous stream of syngas for combustion gasification. The maximum biomass content shall not exceed 5 percent by weight of fuels gasified, as measured during each calendar day. A log shall be maintained at the facility demonstrating compliance with this condition, documenting the unique blend of Bahia grass with coal or petcoke. This log shall be available for inspection and submitted with the final test report. Performance

*"More Protection, Less Process"*

*Printed on recycled paper.*

testing (mass balance, syngas testing and stack testing) shall be conducted for each unique blend of biomass gasified with each unique blend of coal or petcoke.

3. Emissions due to biomass gasification shall not exceed any current limit in existing permits for all impacted emission units. This test-burn shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C. Performance testing shall cease as soon as possible if the test results in any emissions, which are not in accordance with the conditions in existing permits, or this authorization protocol. The test burn shall not resume until appropriate measures to correct the problem(s) have been implemented. The Southwest District shall be notified immediately upon such cessation and resumption.
4. Representative samples of "as-burned" coal, petcoke and biomass shall be taken and analyzed for each unique blend of biomass gasified with each unique blend of coal or petcoke. All sample results shall be submitted with the final report.
5. As-burned (syngas) fuel samples shall be collected and analyzed as "refinery gas" (as has been done with past compliance tests) upon initial gasification of each unique blend of biomass gasified with each unique blend of coal or petcoke. Sample results shall be provided to the DEP Southwest District and the Bureau of Air Regulation with the final report.
6. To provide reasonable assurance that the ash generated from any fuel blend can be disposed of in a method to be proposed by TEC, as well as to ensure compliance with the solid and hazardous waste regulations, representative samples of the gasifier slag generated as the result of gasifying coal and petcoke with biomass shall be segregated, sampled and analyzed in accordance with the requirements set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition."
7. Stack gas emissions testing for SO<sub>2</sub>, NO<sub>x</sub> and CO shall be conducted for each unique blend of biomass gasified with each unique blend of coal or petcoke and results reported for all measured syngas constituents as well as all currently regulated pollutants. Alternatively, CEM data may be utilized (if available) provided that the CEMS are quality assured pursuant to 40 CFR 75. The data assessment reports from 40 CFR 60 for the most recent RATA and CGA shall be submitted along with most recent CEMS QA reports.
8. All stack performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), unless otherwise approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C. All performance testing shall be submitted with the final report.
9. This Department action is only to authorize the temporary blend performance testing of biomass consisting of Bahia grass.
10. The Department's Southwest District, and the Bureau of Air Regulation shall be notified within 5 days, in writing, upon completion of the biomass test burn program.
11. All testing series shall include emissions testing for emissions units operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the capacity allowed by existing permits.

This letter must be attached to permit No. PSD-FL-194 (current revision) and shall become a part of the permit.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. 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 permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Under Section 120.60(3), F.S., any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within fourteen (14) days of receipt of this notice of intent. 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, F.A.C.

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.

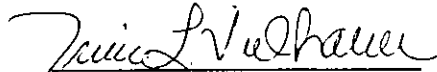
This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-

Ms. Laura Crouch  
TEC / Biomass Test Burn – Bahia Grass  
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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 action will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., 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.

Sincerely,



Trina L. Vielhauer, Chief  
Bureau of Air Regulation  
Division of Air Resource Management

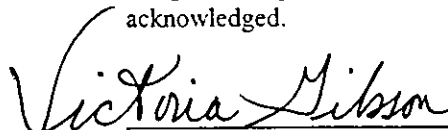
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Authorization to Conduct Performance Tests was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 11/25/03 to the person(s) listed:

Mark J. Hornick, TEC\*  
Laura Crouch, TEC\*  
Jim Little, EPA Region 4  
Gerald Kissell, DEP SWD  
Buck Oven, DEP PPSO  
Jeff Spence, Polk County

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)

11/25/03  
(Date)