

Department of Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

October 5, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

REC'D

OCT 11 1994

**ENV. PROT. COMM.
OF H.C.**

Mr. Patrick Ho, P.E.
Manager of Environmental Planning
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

Dear Mr. Ho:

Re: Request to Conduct Tests for Pollutant Emissions While Firing a Blend of Petroleum Coke and Coal in Tampa Electric Company's (TEC) Big Bend Unit #4, Site Certification No. PA 79-12; and, Amendment to PSD-FL-040(A)

The Department has reviewed the request that you provided on August 8, 1994 (attached). We have also considered the Department's legal authority to allow TEC's Big Bend Unit #4 to conduct the performance tests. Paragraph 403.061(15), Florida Statutes (F.S.), authorizes the Department to consult with any person proposing to construct, install, or otherwise acquire a pollution control device or system concerning the efficacy of such device or system, or the pollution problem which may be related to the source, device, or system. Paragraph 403.061(16), F.S., authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Rule 62-210.700(5), Florida Administrative Code (F.A.C.), authorizes the Department to consider variations in industrial equipment and make allowances for excess emissions that provide practical regulatory controls consistent with the public interest.

In accordance with the provisions of Paragraphs 403.061(15), (16), (18), and 403.516(1), F.S., and contingent on 14 days prior public notice (see attached notice to be published by TEC) and contingent on resolution of any written responses by persons whose substantial interests are negatively affected by your proposal, you are hereby authorized to conduct performance tests for pollutant emissions on TEC's Big Bend Unit #4 while firing a blend of petroleum coke and coal. TEC's Big Bend Unit #4 was permitted under Site Certification, No. PA 79-12, and is certified to fire only coal in accordance with the referenced Site Certification.

The emissions tests are being proposed in order to gather data regarding pollutant emissions while firing a maximum of 20%, by weight, blend of petroleum coke and coal. Screening to determine whether this change results in a modification or to determine Prevention of Significant Deterioration (PSD) applicability shall be in accordance with Chapter 403, F.S.; Chapters 62-209 thru 62-297 and 62-4, F.A.C.; and, Title 40 Code of Federal Regulations (CFR; July 1, 1993 version), which will compare the actual pollutant emissions of the baseline tests (100% coal) to the actual pollutant emissions of the performance tests while firing a blend of petroleum coke and coal. The performance test results will be reviewed by the Department's Bureau of Air Regulation (BAR) and involved agencies/parties (i.e., Environmental Protection Commission of Hillsborough County (EPCHC), U.S. EPA, National Park Service, etc.).

The performance tests shall be subject to the following conditions (conditions Nos. 2, 3, 4, 7, 8 and 11 have been revised from the September 6, 1994 proposal due to the letter received from TEC dated September 29, 1994, and in-house discussions):

1. The permittee shall notify, in writing, the Department's BAR office, the EPCHC office, and the Site Certification office at least 15 days prior to commencement of the trial baseline and petroleum coke and coal blend performance tests. A written test result report shall be submitted to these offices within 45 days upon completion of the last test run.
2. The trial petroleum coke and coal blend performance tests shall be conducted for not more than 21 days. All testing shall be concluded within 60 days of when petroleum coke is first introduced into TEC's Big Bend Unit #4. A satisfactory emissions test will consist of a minimum of six test runs per pollutant.
3. As-burned fuel samples shall be collected and analyzed for the sulfur, nitrogen, and metals (see condition No. 4) content throughout the petroleum coke and the baseline coal test periods. Weekly composites from daily sampling shall be required; in addition and during the particulate matter test runs, a minimum of three (3) separate samples shall be taken and analyzed.
4. The concentration of chromium, lead, mercury, nickel, beryllium, vanadium, and zinc in the petroleum coke blend shall be compared to the concentration of the same metals in the coal used during the baseline tests.
5. The trial burn of petroleum coke and coal blends shall be limited to a maximum of 20% petroleum coke, by weight, with coal (pure coal sulfur content not to exceed permitted value: see PSD-FL-040).

6. The maximum weight of the petroleum coke burned during the performance tests shall not exceed 67,190 lbs/hr.
7. Sulfur dioxide, nitrogen oxides (NOx), and opacity emissions data shall be recorded using continuous emissions monitors (CEMS) during the baseline and trial burn tests. If the plant CEMS are used for these tests, these systems shall be quality assured pursuant to 40 CFR 60, Appendix F requirements. The data assessment report from 40 CFR 60, Appendix F, for the most recent relative accuracy test audit (RATA) and most recent cylinder gas audit (CGA), shall be submitted with the trial burn test report. In addition, stack tests shall be conducted for the pollutants particulate matter (PM; assume that all of PM is PM10), carbon monoxide, and sulfuric acid mist.
8. For modification purposes, the pollutant emissions results from the trial petroleum coke and coal blend performance tests shall be compared to the baseline tests conducted when firing coal only.
9. Any performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Rule 62-297.620, F.A.C.
10. If additional time is needed, the permittee shall request an extension of time and provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
11. Daily records (i.e., heat input, steam production, pressure, temperature, MW, fuel input rates, etc.) of boiler operations while firing a blend of petroleum coke and coal and while firing only coal (baseline) during the tests shall be required. Also, daily record keeping of the control equipment parameters shall be required and any alteration of the control equipment operational parameters between the baseline and trial burn test shall be documented and summarized in the final report.
12. A Type I or II stack audit may be conducted by the EPCHC office.
13. Complete documentation (recording) of any firing of the petroleum coke and coal blend shall be required (i.e., all CEMS records; testing results; materials utilized, by weight; and, etc.) and kept on file for a minimum of two years.

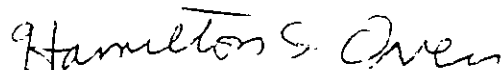
14. The authorized trial petroleum coke and coal blend performance tests shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C.
15. Performance testing shall immediately cease if TEC's Big Bend Unit #4 operations are not in accordance with the conditions in the air section of Site Certification No. PA 79-12; PSD-Fl-040; and, this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
16. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.
17. This Department action is only to authorize the performance tests for a trial petroleum coke and coal blend performance tests where prior public notice was published in a newspaper of general circulation in the Tampa Area. Any firing of petroleum coke after the last performance test run is completed will be deemed a violation of the Site Certification No. PA 79-12; and, PSD-FL-040.
18. The EPCHC office shall be notified, in writing, on the date of the last test run completion.
19. The test series shall include emissions tests for each of the test blends with the source operating at permitted capacity. The baseline test shall be conducted for no less than seven days with the source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the Site Certification and permit (PSD-FL-040) capacity. If it is impracticable to test at this capacity (i.e., less than 90% of maximum operating rate allowed by the Site Certification and the permit), then the source may be tested at less than capacity for the trial burn and baseline tests; and, in this case, subsequent source operation with a petroleum coke and coal blend, if requested and approved by the Department, is limited to 110 percent of the test load until new tests are conducted, which requires prior Department authorization.
20. Prior written approval of the pollutants to be tested for and the appropriate test methods is mandatory prior to commencement of testing. The proposal shall be submitted to the Site Certification office, the BAR office, and the EPCHC office for approval.

Site Certification No. PA 79-12 and PSD-FL-040(A)
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21. Attachments to be incorporated:
- o TEC's August 5, 1994 letter with Attachments.
 - o DEP's proposed test authorization dated September 6, 1994.
 - o TEC's September 29, 1994 letter with Attachment.

Please publish the attached Notice.

Sincerely,



Hamilton S. Owen, P.E.
Administrator, Siting
Coordination Office

Attachments

cc: Clair Fancy, DEP
Jewell Harper, EPA/Region IV
John Bunyak, NPS
Jerry Campbell, EPCHC
Doug Beason, Esq., DEP

State of Florida
Department of Environmental Protection
Notice of Intent to Issue

Tampa Electric Company (TEC), Big Bend Unit #4

Site Certification No. PA 79-12

PSD-FL-040(A)

The Department of Environmental Protection (Department) hereby gives notice of its intent to issue to TEC, an approval authorizing performance tests for pollutant emissions while firing a blend of petroleum coke and coal. The proposal is detailed in the trial performance test request. The Department is issuing this authorization for the reasons stated below.

The applicant, Tampa Electric Company, P. O. Box 111, Tampa, Florida 33601-0111, submitted a request on August 8, 1994, to the Department's Siting Coordination Section for authorization to conduct pollutant emissions tests on the TEC's Big Bend Unit #4 boiler while firing a blend of petroleum coke and coal. The performance tests for pollutant emissions will be conducted at baseline conditions while firing coal only and while firing a blend of petroleum coke and coal. Petroleum coke will be blended at a maximum of 20 percent, by weight, with coal during the trial performance tests. TEC's Big Bend Unit #4 was certified under Site Certification No. PA 79-12 (PSD-FL-040) and is not currently permitted to fire petroleum coke in accordance with the referenced Site Certification.

Screening for a modification and Prevention of Signification (PSD) will be in accordance with Chapter 403, Florida Statutes (F.S.); Florida Administrative Code (F.A.C.) Chapters 62-209 through 62-297 and 62-4; and, Title 40 of the Code of Federal Regulations [CFR; Parts 52, 60, 61, and 266 (July 1, 1993 version)].

If, after the performance test results are evaluated by the Department's Site Certification Section and affected parties (i.e., Environmental Protection Commission of Hillsborough County, U.S. EPA, National Park Service, etc.) and it is determined that actual pollutant emissions [baseline @ 100% coal vs. a blend of petroleum coke and coal] did not increase, the Department may issue a modification to Site Certification PA 79-12 [PSD-FL-040(A)] authorizing continuous utilization/firing of a blend of petroleum coke and coal in the TEC's Big Bend Unit #4. However, if there is an actual emissions increase in pollutant emissions, TEC will not be permitted to fire a blend of petroleum coke and coal in the

emissions unit without further evaluation by the Department's Site Certification Section and involved agencies/parties. The proposed project will occur at the applicant's facility located in Tampa, Hillsborough County, Florida.

The Department has jurisdiction under Paragraph 403.516(1), F.S. The project is not exempt from Site Certification procedures. The Department has determined that a Site Certification modification is required to make the proposed activity permanent. If TEC wishes to modify the conditions of certification to allow the burning of petroleum coke and coal blend in the Big Bend Unit #4, a subsequent proceeding will be announced providing an opportunity for any affected person to object in the following manner.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 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 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Site Certification File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The request is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Site Certification Section
3900 Commonwealth Blvd.
Tallahassee, Florida 32399-3000

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive
Tallahassee, Florida 32399-2400

Environmental Protection Commission of Hillsborough County
1410 N. 21st Street
Tampa, Florida 33605

Any person may send written comments on the proposed action to Mr. Hamilton Owen, Site Certification Section, at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.