STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the Matter of an Application for Permit by:

Ms. Karen A. Sheffield, P.E. General Manager Tampa Electric Company P. O. Box 111 Tampa, Florida 33601-0111 Permit No.: 0570040-012-AC F. J. Gannon Station Unit Nos. 1, 2, & 4 WDF

Modification

Enclosed is the Final Permit 0570040-012-AC for the modification of the F. J. Gannon Station Unit Nos. 1, 2, and 4 steam generator operating limitations to allow the firing of a coal and wood-derived fuel (WDF) blend. The F. J. Gannon Station is located at Port Sutton Road, Tampa, Hillsborough County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

C.H. Fancy, P.E., Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

Karen Sheffield, P.E., TECO * Thomas W. Davis, P.E., ECT Bill Thomas, P.E., SWD Jerry Campbell, P.E., EPCHC

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.

erk, receipt of which is hereby acknowledge

Clerk)

(Date)

		MAIL REC	EIPT Coverage Provided)
E 2.	Ms. Karen A.	Sheffield,	P.E.
0021 6524	Postage Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required)	\$	Postmark Here
2000 0002	Ms. Karen A Street, Apt. No.; or PO Bo P.O. Box 11	\$. Sheffield, . ida 33601-0	P.E.

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FINAL DETERMINATION

Tampa Electric Company (TECO)
F. J. Gannon Station
Facility ID No.: 0570040
Hillsborough County

Air Construction (Modification) Permit **Permit No.:** 0570040-012-AC

The Department distributed a public notice package on June 14, 2001 for the modification of the F. J. Gannon Station Unit Nos. 1, 2, and 4 steam generator operating limitations to allow the firing of a coal and wood-derived fuel (WDF) blend. The Public Notice of Intent to Issue was published in the Tampa Tribune on July 9, 2001.

No comments were received.

CONCLUSION

The final action of the Department is to issue the permit as noticed.



Department of Environmental Protection

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

David B. Struhs Secretary

Permittee:

Tampa Electric Company P.O. Box 111

Tampa, Florida 33601-0111

Expiration Date: July 5, 2002 Permit No.: 0570040-012-AC Facility ID No.: 0570040

SIC No.: 49, 4911

Project: Gannon Station - Unit Nos. 1, 2, & 4

WDF Modification

STATEMENT OF BASIS: This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-204, 62-210, 62-212, 62-213, 62-296, 62-297, and Chapter 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Florida Department of Environmental Protection:

This permit is for the modification of the F. J. Gannon Station Unit Nos. 1, 2, and 4 steam generator operating limitations to allow for the firing of a coal and wood-derived fuel (WDF) blend. WDF can be composed of Paper Pellets, Yard Trash, and Wood/Wood Chips, as defined in this permit.

Effective Date: (clerk date)

Howard L. Rhodes, Director

Division of Air Resources

Management

HLR/sms

Permit No.: 0570040-012-AC Project: WDF Modification

Subsection A. Summary of Emissions Unit ID Nos. and Brief Descriptions.

<u>E.U.</u>	
ID No.	Brief Description
-001	Unit No. 1-Fossil Fuel-Fired Steam Generator
-002	Unit No. 2-Fossil Fuel-Fired Steam Generator
-004	Unit No. 4-Fossil Fuel-Fired Steam Generator

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test submittals, applications, etc.

Subsection B. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are on file with permitting authority:

AC permit application received August 28, 2000.

Additional information requested September 26, 2000.

TECO response received November 27, 2000.

Additional information requested December 27, 2000.

TECO response received March 21, 2001.

Tampa Electric Company F. J. Gannon Station

Permit No.: 0570040-012-AC **Project:** WDF Modification

1. A part of this permit is the attached 15 General Conditions. [Rule 62-4.160, F.A.C.]

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, or any other requirements under federal, state or local law. [Rule 62-210.300, F.A.C.]

Operation Limitations - Fuels

- 3. This permit allows Unit Nos. 1, 2, and 4 to be fired on a coal/wood-derived fuel (WDF) blend with the following restrictions:
 - A. The maximum amount of WDF fired in a boiler shall not exceed 10% of the fuel fired in a boiler on a weight basis. The total quantity of WDF fired in Unit Nos. 1, 2, 3, and 4 shall not exceed 56,940 tons per consecutive 12-month period (56,940 TPY is the calculated weight basis from Unit No. 3, allowed by Permit No. 0570040-011-AC).

 (*Note: See C. below for additional restrictions.)
 - B. WDF shall be defined only as material falling under one of the following type categories (* *Note: See C. below for additional restrictions*):
 - i. <u>Paper Pellets</u> Pellets consisting of paper, cardboard and polymer-impregnated or coated paper, such as disposable drinking cups, paper plates, etc., It shall include no materials coated or treated with hazardous substances including, but not limited to, tar, asphalt, and coatings containing heavy metals. Pellets shall be free of hazardous substances and as free as practicable of metal, hard plastics, textiles, and food products.
 - ii. <u>Yard Trash</u> As defined in Rule 62-701.200 (90), F.A.C., and shall contain only vegetative material resulting from landscaping maintenance or land clearing operations and includes materials such as trees and shrub trimmings, grass clippings, palm fronds, trees and tree stumps.
 - iii. Wood/Wood Chips Derived from clean wood lumber, pallets, construction debris free of listed hazardous substances including, but not limited to, pentachlorophenol, creosote, tar, asphalt, and paint containing heavy metals.
 - C. Based upon the operating conditions during the April 18 and 19, 2000, WDF test burn for Unit No.3, the following additional WDF usage restrictions apply <u>until additional compliance</u> stack testing is done during firing of different WDF blend ratios and WDF types.
 - i. WDF is limited to a maximum of 4.0% of the fuel fired in a unit on a weight basis.
 - ii. WDF is limited to paper pellets only.

Permit No.: 0570040-012-AC Project: WDF Modification

In order to increase the WDF blend ratio above the level in C. i. (but never to exceed 10% WDF), or allow for the blending of Yard Trash and Wood/Wood Chips as part of the WDF, then additional testing shall be conducted on the applicable unit. To increase the blend % for WDF consisting of paper pellets only, PM and VE testing only will be required. Successful testing showing compliance with the operation permit limitations at a higher blend ratio will allow future operation up to that level + 10% (not to exceed 10% WDF by weight). Successful testing (i.e. testing showing compliance with the permit limitations and demonstrating no increase in emissions due to the inclusion of the additional types of WDF) while firing Yard Trash and Wood/Wood Chips will allow for subsequent use of those categories of WDF as part of the coal/WDF blend. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department and the Air Management Division of the Environmental Protection Commission of Hillsborough County (EPC), at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. The test notification shall include a proposed test protocol which, upon agreement by the Department, will establish the testing to be done and the conditions under which the test will be conducted and evaluated. A copy of the test report shall be submitted to the Air Management Division of the EPC and the Air Compliance Section of the Southwest District Office of the Department within 45 days after the test is completed.

<u>Testing Note</u>: As it deems appropriate and applicable, the Department may take into account the results of any WDF blend testing conducted on a unit in approving changes to WDF types and blend ratios in lieu of additional testing.

D. Paper pellets fired in this unit shall be produced using a waste separation process as described or similar to that described as the "typical waste separation process for Paper Pellets" submitted as Attachment D to the application for Permit No. 0570040-011-AC, including separation of large items, hand sorting, metal extraction/separation, air classification, organic material screening, and large film plastic removal; or equivalent waste separation processing methods (i.e. methods that are designed to result in a target level of approximately 5% or less non-paper materials in the final waste stream). Each time that the permittee receives material from a new paper pellet supplier, or there is a significant change in the waste separation process of a prior supplier, the permittee shall submit a detailed description of the waste separation process used by that supplier (or changes to a previously submitted supplier's process) to the Air Management Division of the Environmental Protection Commission of Hillsborough. The Department reserves the right to request additional information, require additional testing of, or disapprove use of paper pellets from this supplier if it has good reason to believe that this waste separation process will not result in material that meets the above definition of Paper Pellets.

Tampa Electric Company F. J. Gannon Station

Permit No.: 0570040-012-AC Project: WDF Modification

[Rules 62-4.070(3), 62-297.310(7)(a)9, and 62-297.310(8), F.A.C., permit application dated August 1998, and Department test burn authorization letter of March 18, 1997]

3.1. The firing of coal and WDF blend in these units is prohibited after December 31, 2004. [Consent Decree (U.S. vs. TECO) dated February 29, 2000]

Additional Recordkeeping Requirements

4. In order to document compliance with Specific Condition No. 3, the permittee shall maintain <u>daily</u> records for each unit of the quantity (tons) of WDF fired, with a statement as to the type(s) of WDF included (i.e. Paper Pellets, Yard Trash and/or Wood/Wood Chips), and the coal/WDF blend ratio (on a weight basis). The permittee shall also keep records, on a <u>monthly</u> basis of the estimated total of WDF fired by type (i.e. Paper Pellets, Yard Trash and/or Wood/Wood Chips). This monthly record shall also include a statement identifying the suppliers of the paper pellets used that month. These records shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a five (5) year period. [Rule 62-4.070(3), F.A.C.]

Additional Compliance Testing Requirements

5. Future annual particulate matter and visible emissions testing shall be conducted while firing coal/WDF blend at 90-100% of the maximum permitted WDF blend ratio (or the maximum WDF blend ration for which the permittee wants the unit to be permitted for, not to exceed 10% WDF). This requirement may be waived (and testing done on 100% coal) if coal/WDF blend has been fired for less than 400 hours in the previous 12 month period and it is anticipated that it will not be used for more than 400 hours in the next 12 month period. The test reports shall include a statement and documentation of the coal/WDF blend ratio (weight basis) in use during the test, including a statement as to the types of WDF (i.e. Paper Pellets, Yard Trash and/or Wood/Wood Chips) included in the WDF material fired.

[Rules 62-4.070(3), and 62-297.310(20) and (8), F.A.C.]

Title V Permit Revision

6. Within 180 days of completion of testing of each unit, the permittee shall submit a Title V operation permit revision application to include the terms of this construction permit in the Title V permit for the F. J. Gannon Station. [Rule 62-213.420, F.A.C.]

TO:

Howard L. Rhodes

FROM:

Clair H. Fancy

DATE:

August 16, 2001

SUBJECT:

FINAL Permit Number 0570040-012-AC

Tampa Electric Company (TECO)

F. J. Gannon Station

This facility consists of six steam boilers (Units 1 through 6). The nominal output is 1317 megawatts (MW). The facility utilizes coal as its primary fuel for Units 1-6.

This permit authorizes the modification of the F. J. Gannon Station Unit Nos. 1, 2, and 4 steam generator operating limitations to allow the firing of a coal and wood-derived fuel (WDF) blend. Unit No. 3 already fires a coal and WDF blend. This permit allows the other boilers to fire the blend. The total quantity of WDF allowed to be burned at the facility has not changed.

We received no comments. I recommend issuance.

Attachment

CHF/sms