

Department of Environmental Protection

Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Virginia B. Wetherell Secretary

January 14, 1998

Ms. Theresa Watley
TECO
P.O. Box 111
Tampa, FL 33601-0111

RE: Your attached letters 12/29/97 Gannon Fuel Yard and 12/30/97 Gannon RDF Test Burn

Dear Ms. Watley:

Gannon Fuel Yard

DEP's New Source Review Section in Tallahassee will make a determination as to PSD applicability. If they determine non-applicability, we (the Southwest District) will continue to process and issue the permit. If they determine that PSD is applicable, they will take over the processing at that point.

Gannon RDF Test Burn

The Southwest District will process this authorization.

Future TECO Air Permitting

DEP's Tallahassee office will be the lead processor on future applications, authorizations, etc. Please address these requests, as appropriate, either to the New Source Review Section or the Title V Section. Please continue to send copies to EPCHC and SWD.

Sincerely,

G. J. Kissel, P.E.

Air Permitting Supervisor

c: R. Kirby, EPCHC

A. Linero, DEP

S. Sheplak, DEP

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BUREAU OF AIR REGULATION

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IAMI A ELEGIR

December 30, 1997



Mr. Gerald Kissel, P.E. Air Permitting Supervisor Southwest District Florida Department of Environmental Protection 3804 Coconut Palm Drive Tampa. Florida 33619 Certified Mail No. 240 442 408 Return Receipt Requested

Re: Tampa Electric Company - F. J. Gannon Station Unit 4

Request to Conduct Pelletized Refuse-Derived Fuel Test Burn

Operating Permit No. AO29-255208

Dear Mr. Kissel:

Tampa Electric Company (TEC) is continuing to evaluate the feasibility of using supplemental fuels at Gannon Station. TEC considers the use of these supplemental fuels to be a viable method of converting solid waste streams that are typically land-filled into usable energy. Currently, TEC is initiating the 60-day test burn period for Wood Derived Fuel (WDF) in the Gannon Unit 3 boiler. WDF consists of a variety of carbonaceous materials that include paper pellets, yard trash and wood wastes. TEC would now like to proceed with evaluating paper pellets or pelletized refuse-derived fuel (pRDF) as a supplemental fuel in Gannon Unit 4. TEC is <u>not</u> requesting the inclusion of yard trash and wood chips in this Unit 4 test burn.

As presented to the Department for the Unit 3 test burn, pRDF consist primarily of paper, cardboard and film plastics that are dried, shredded and formed into fuel pellets. This pelletization process includes sorting the municipal waste stream by hand and mechanical methods to remove metal, hard plastics, textiles, food products, and hazardous substances. Representative fuel analyses for the pRDF are provided in Attachment A for your review. TEC is proposing to conduct this test burn with a 90/10 weight percent coal/pRDF fuel blend. Typical coal analyses for Unit 4 are provided for your review in Attachment B.

TEC has evaluated the pRDF characteristics with the proposed blending ratio of coal and is confident all existing emission limits will be met during the test burn period. Criteria pollutant emissions will not change because of pRDF combustion, with one notable exception. A slight decrease in sulfur dioxide (SO₂) emissions, expected to be marginally measurable, may occur because the supplemental fuel contains less sulfur than the coal now being burned. Particulate matter (PM) emissions are not expected to change because the ash content of the supplemental fuel and the coal being similar. SO₂ and PM emission calculations for burning the supplemental fuel in Unit 4 are provided in Attachment C. Nitrogen oxide (NO_x) emissions are not expected to change because no modifications will be made to the boiler or the burner, and because combustion temperature will remain unchanged. In fact, the unit will not

TAMPA ELECTRIC COMPANY

P.O. BOX 111

TAMPA, FL 33601-0111

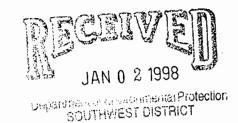
HILLSBORDUGH COUNTY 223-0800

DUTSIDE OF HILLSBOROUGH COUNTY 1-888-223-0800

HTTP://WWW.TECOENERGY.COM

AN EQUAL OPPORTUNITY COMPANY

Mr. Gerald Kissel, P.E. December 30, 1997 Page 2 of 2



require any alteration of any kind to accommodate combustion of the supplemental fuel. In addition, TEC has compiled a listing of emission factors for non-criteria pollutants of concern (to the Department) that may be present in the emissions from the proposed coal/pRDF fuel blend, calculated emission rates for these pollutants of concern from the proposed coal/pRDF blend, conducted dispersion modeling to determine the ambient impact of each pollutant of concern, and compared the modeled ambient impact for each pollutant of concern to the Department's draft guidance on ambient reference concentrations (ARC). This analysis demonstrates that burning the coal/pRDF fuel blend in Unit 4 will not cause an exceedance of any ARC of concern under the "worst case" test burn scenario. Tables summarizing this information and the assumption used in the calculations are presented in Attachments D, E, F, and G.

TEC proposes to conduct the test burn with a blend of pRDF and the typical coal supply for a period of twenty-one (21) days. All testing shall be concluded within sixty (60) days of when pRDF is first introduced in Unit 4. The proposed test burn protocol is provided in Attachment H.

TEC proposes to begin this test burn upon Department approval. Therefore, an expeditious review of this request is appreciated. If you have any questions or comments on this matter, please feel free to contact me at (813) 641-5034.

Sincerely,

Theresa J.L. Watley Consulting Engineer Environmental Planning

EP\gm\TJLW582

Attachments

c/att: Mr. Clair Fancy-FDEP

Mr. Jerry Campbell-EPCHC



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

December 1, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Paul Amundsen, Esquire Amundsen and Moore Attorneys at Law 502 East Park Avenue Tallahassee, Florida 32302-1759

Dear Mr. Amundsen:

We received your letter dated November 18 requesting timely written notice of any requests by TECO to burn fuels other than coal. Any such application will be processed by the Bureau of Air Regulation. We have established a site on our web site which lists application received. You may be interested in reviewing the information on the site from time to time. Our address is www.dep.state.fl.us. Once you see an application of interest, you can request to be copied on correspondence regarding that request. That is easy to do because we can add your name to the list of interested parties in the entry for that specific application in our database. We will also include a note to that effect in the hardcopy file for that permitting action.

We will endeavor to actively notify you soon after we receive any such applications from TECO. However the request is open-ended, does not specify any time limits, and concerns future applications for which there exist no public records. Therefore we cannot ensure that you will always receive notification on a timely basis.

If you have any questions regarding this matter, please call Doug Beason at 850/921-9624. If you wish to learn how to access the information on the website, please call Al Linero at 850/488-1344.

Sincerely.

Howard L. Rhodes, Director Division of Air Resources

Management

HLR/aal

cc: W. Douglas Beason, Esq.

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ATTORNEYS AT LAW

PAUL H. AMUNDSEN
RICHARD W. MOORE
RICHARD E. TORPY
RODOLFO NUÑEZ
MICHAEL J. MERENSTEIN
JULIA E. SMITH

OF COUNSEL: BYRON B. MATHEWS, JR. 502 EAST PARK AVENUE TALLAHASSEE, FLORIDA 32301 (850) 425-2444 FACSIMILE: (850) 425-2447

PLEASE REPLY TO: POST OFFICE DRAWER 1759 TALLAHASSEE, FLORIDA 32302-1759 BREVARD COUNTY OFFICE in SUITE 203
MELBOURNE, FL 32901
(407) 724-6262
FACSIMILE: (407) 727-2006

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November 18, 1997 ESOURCES MANAGEMENT

Certified - Return Receipt Requested

Howard Rhodes, Director
Division of Air Resources Management
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Request for Actual Notice Regarding Proposals to Burn other Fuels at TECO's Gannon Station

Dear Mr. Rhodes:

As you know, this office represents Ridge Generating Station, L.P. ("Ridge"). Ridge was a party petitioner in formal administrative proceedings on two air permits sought by Tampa Electric Company ("TECO") to burn tire-derived fuel at TECO's Gannon Plant in Hillsborough County. Last month, TECO withdrew both of those permit applications and consequently the formal proceedings were dismissed.

The purpose of this letter is to request that DEP provide this office with timely, written notice of any similar requests by TECO to burn any fuels other than coal at the Gannon Station and additionally, timely, written notice of DEP's intended action on any such proposals by TECO.

For example, and without limiting the breadth of my request above, projects for which I am asking for actual notice are any TECO request to DEP for authorization of any kind to burn tirederived fuel, paper pellets, yard waste, wood or wood chips, yard clippings, petroleum coke, and any combinations or blends of these or similar fuels.

Additionally, actual notice is requested for any proposed changes or alterations or modifications to the fuel yard at the Gannon Station.

Mr. Howard Rhodes November 18, 1997 Page two

Finally, I would appreciate you advising me immediately if for any reason the DEP will not provide the notice that I am requesting in this letter.

Thank you very much.

Sincerely/

Paul H. Amundsen

PHA/mb

cc: W. Douglas Beason, Esquire

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TIRE BURNING ISSUE

- ♦ The Wheelabrator Ridge Facility is a 50MW electrical generating facility fueled by waste wood and waste tires near Lakeland, Florida.
- The Facility burns approximately 300,000 tons/year of wood and 45,000 tons/year (4,500,000 tires).
- During the Pre-Application Meeting with the FDEP in the fall of 1991, the Company was told that, in order to be permitted to burn tires, a spray dryer absorber for SO2 control and fabric filter would be required. If burning only wood, an electrostatic precipitator would meet permit requirements.
- The Company made the decision to assume the added capital cost, as well as the additional ongoing operational cost of the S.D.A. and fabric filter because the relative fuel price advantage of tires vs. wood justified the expenditure.
- In 1995, when the Ridge Facility applied to increase its tire burning capacity from 32,000 tons per year to 45,000 tons per year the Company had to <u>agree to reduce its initial SO2</u> limits from 109.4#/hour to 65#/hour in the final permit in order to gain state approval.
- Tampa Electric is now applying for a permit modification to allow its Gannon Station Unit 3 to burn tires with SO2 emissions uncontrolled.
- To now have someone with <u>no SO2</u> control equipment be allowed to burn tires because they have a lax 1980's SO2 permit (2.4#/MMBTU at Gannon vs. 0.1#/MMBTU at Ridge) is inconceivable.
- Since the Ridge Facility started up in 1994, all known significant tire piles have been consumed in central and southern Florida and the disposal is no longer a problem in Florida.

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TO: A. Linero

FROM: J. Kissel

DATE: September 10, 1997

SUBJECT: TECO Gannon Tire-Derived Fuel/PSD (Teco/Wheelabrator)

You've discussed with us at the Southwest District the addition of a condition in the permits along the lines of 'future emissions can not exceed baseline emissions by more than the PSD-significant increment'. We would like to define in advance how that determination would be made and when we and Hillsborough EPC met with Teco last week, we did not agree. Thus this letter.

Gannon 3 has run an average of 5,750 hours on coal in the agreed-upon 1995-96 base period and emitted an average of 6,150 tons per year of SO_2 . Here are the two extremes as to the way this could be viewed:

- 1) Since it has been determined that a modification has occurred, then the whole unit is "in play" and any annual increase in SO_2 over the PSD-significant level (40 tpy) would subject the unit to retroactive PSD/BACT. Thus in 1998 if it ran 5,750 hours on coal plus 575 hours on coal/TDF blend, then emissions of say, 6,700 tpy would constitute a PSD exceedance. Similarly, 7,000 hours on coal plus 100 hours on coal/TDF would be an exceedance at say, 7,500 tpy SO_2 . This may be consistent with a strict interpretation of the PSD rules, but it seems clearly wrong.
- 2) Teco's position is that only the hours spent burning TDF should be counted (although hours are discussed in this memo for simplicity, it is really BTU's that would be used as the basis that does not change the reasoning of this memo). Furthermore, it is only the TDF portion of the blend that should be counted. In other words, the emissions from the TDF only, should be compared with the emissions from the comparable BTU's of coal in the base period. In this case, if the unit were dispatched 8,750 hours in 1998 5,750 hours on coal and 3,000 hours on coal/TDF blend, and total emissions were, say 9,000 tpy, this would not be a violation

if the substitution of TDF for the same btu's of coal did not cause more than a 40 tpy increase in emissions. Emissions from the TDF alone calculate to about 600 tpy. In other words, even if the unit were dispatched an additional 3,000 hours because of the modification, and it emitted hundreds of additional tons because of the modification, it would not fail the PSD test if emissions per comparable BTU's of coal did not increase more than 40 tpy. This seems clearly wrong, just as case 1) does.

All of the above would have to be adjusted for the WEPCO decision reasoning, but an extra 3,000 hours of dispatch could not be explained by normal load growth, etc.

Teco has told us of the JEA and Palatka permits as precedent and support for their position, but we have told them that these seem to discuss compliance on an hourly basis and do not address the PSD tons per year issue. I.e., the use of Teco's reasoning seems to create a test that they can't fail.

A couple of side comments:

- 1) Under Teco's scenario it would be necessary to take the SO_2 reading from the CEM and allocate between the coal and the TDF, which is doable.
- 2) Do you know the address or path to the EPA's PSD cases on the internet? There may be precedent there.

We're looking for some guidance on this from Tall'e. I don't think that this is a subject for the hearing, since it deals with a future test and thus is not relevant to the Wheelabrator petition.

- c: D. Beason
 - M. Costello
 - R. Kirby, EPC

file



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BUREAU OF AIR REGULATION

Via Fax and U.S. Mail

February 2, 1999

Mr. Jerry Kissel, P.E. Florida Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Re: Tampa Electric Company (TEC) - F. J. Gannon Station

Unit #3 Wood Derived Fuel Construction/Modification Permit

Proof of Publication of the Intent to Issue

FDEP File No. 0570040-008-AC

Dear Mr. Kissel:

Pursuant to Rule 62-110.106(5), F.A.C., enclosed is the proof of publication of the Notice of Intent to Issue the Tampa Electric Company F.J. Gannon Station Unit #3 Wood Derived Fuel Construction/ Modification Permit. This notice was published in the legal section of the Tampa Tribune on Thursday, January 28, 1999.

Thank you for your attention to this matter. If you have any concerns or questions feel free to contact me at (813) 641-5034.

Sincerely,

Theresa J.L. Watley

Consulting Engineer

Environmental Planning

EP\bj\tjlw629

c/enc: Mr. Al. Linero-FDEP

Mr. Richard Kirby-EPCHC

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Department of Environmental Protection AIR RECUE AIR RECUE Department of

AllR REGULATION Secretary

Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Ms. Theresa J. L. Wately,
Consulting Engineer, Environmental Planning
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

September 8, 1998

Dear Ms. Watley:

Re: TECO F. J. Gannon Unit 3
Wood Derived Fuel Air Test Burn/Operating Permit Amendment
(DEP Project No. 0570040-008-AC)

On August 10, 1998, the Department received your air pollution operation permit amendment application for F.J. Gannon Unit 3. This requests was for the permit (AO29-172179) to be amended to allow for the firing of a coal and wood derived fuel (WDF) blend in this unit. In order to continue processing the application, the Department will need additional information pursuant to Rule 62-4.070(1), F.A.C.

Our understanding of the PSD situation regarding this application is as follows:

- 1. That this change constitutes a modification in that it is a physical and operational change (the addition of a fuel for which the unit was not previously equipped to burn) that results in an increase in actual emissions.
- 2. The "increase in actual emissions" mentioned above refers to prior actual emissions compared to future actual (i.e. allowable) emissions in accordance with the definition of actual emissions in Rule 62-210.200(12)(d), F.A.C.
- 3. If the increase in actual emssions referred to above, on a tons/year basis, exceeds the PSD significant levels as shown in Table 212.400-2 contained in Rule 62-212, F.A.C. then PSD is triggered.

The PSD Applicability Analysis submitted with your request did not directly address PSD applicability on the above basis, but rather addressed the change in emissions on a fuel trade-off basis using differences in fuel analysis between all coal and a coal/10% WDF blend. Regardless of the change in hourly emission rate (and the test burn test results (CEM and stack test based) do show an increase in emissions for SO₂, NOx, and VOC when firing the coal/WDF blend), on an actual to allowable basis this modification to add WDF would be a PSD triggering situation.

For your information, by copy of this letter to Mr. Al Linero of the Tallahassee BAR New Source Review Section, we are requesting a determination as to whether they concur that our above interpretation is correct.

In response to this request for more information, please submit further justification as to the non-applicability of PSD, or transfer this request to Tallahassee NSR Section (along with the applicable fee) as a PSD application.

In addition to the above, please find attached a Hillsborough County EPC letter of September 3, 1998 which raises other issues and questions which may have to be addressed when the more fundamental issues above are resolved.

"Notice: Pursuant to the provisions of Section 120.600, F.S. and Subsection 62-12.070(5), F.A.C., if the Department does not receive a response to this request for information within 90 days of the date of this letter, the Department will issue a final order denying your application. You need to respond within 30 days after you receive this letter, responding to as many of the information requests as possible and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 90 days to develop, an application for new construction should be withdrawn and resubmitted when completed information is available. Or for operating permits, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order for Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

If you have any questions concerning this letter, please call me at (813) 744-6100 extension 118.

Sincerely.

David Zell

Air Permitting Engineer Southwest District Office

DRZ/

attachment

copies to:

- Al Linero, Tallahassee DARM BAR, NSR Section
 - Leroy Shelton, Hillsborough County EPC, Air Management Division

COMMISSION

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
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ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL & WATER MANAGEMENT DIVISION 1900 - 9TH AVENUE TAMPA, FLORIDA 33605 TELEPHONE (813) 272-5960 FAX (813) 272-5157

AIR MANAGEMENT DIVISION TELEPHONE (813) 272-5530

WASTE MANAGEMENT DIVISION TELEPHONE (813) 272-5788

WEILANDS MANAGEMENT DIVISION TELEPHONE (813) 272-7104

September 3, 1998

Jerry Kissell, P.E. Florida Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, FL 33619

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Dear Jerry;

'DEF

The following comments are offered on the proposed Air operating Permit for TECO Gannon's Unit 3 to burn Wood Derived Fuel.

Test Results:

1. If you look only at the test results in section 4.0, the test results do fall within permitted limits. Solely based on that, this unit would apparently be able to accommodate the proposed fuel within the existing limits. However, those same test results do show an increase in emissions in several pollutants using the WDF fuel blend.

The PSD applicability analysis (Attachment B):

- 2. Attachment B, note 2, says the material content in fuel ratio is based on the ratio of ash, sulfur, and nitrogen in paper pellets versus coal samples. The emissions changes are not based on the test results. The PSD analysis goes on to project an apparent emissions decrease based on the fuel ratio.
- 3. The applicability analysis only addresses the contribution of the WDF, implying that there will be a 616.2 tpy decrease in SO_2 emissions, for example. It completely ignores the emissions contributed by coal portion of the fuel blend and the stack test results.
- 4. If you use the test results, section 4.0, there is an increase in the emissions from the coal baseline to the WDF on both the CEMS and the stack test results. For example:

CEMS Data:	Baseline	Fuel Blend	Units
Opacity	4	4	%
SO₂	1.80	1.84	lb/MMBtu
NOx	0.92	0.96	lb/MMBtu

Jerry Kissell, P.E. September 3, 1998 page 2 of 2

Stack Test Data:

PM	0.03	0.03	lb/MMBtu
H_2SO_4	0.04	0.04	lb/MMBtu
SO ₂	1.83	1.99	lb/MMBtu
VOC	0.003	0.006	lb/MMBtu
HCl	0.04	0.07	lb/MMBtu
VE	0	0 -	%

- 5. If you use the more conservative SO_2 CEMS increase of 0.04 lb/MMBtu, the SO_2 emissions increase would be 160.55 tpy.
- 6. Why is there such a large difference between the actual annual heat input between 1996 & 1997 on the PSD applicability analysis chart? Note: our copy of the 1996 AOR for unit 3 showed a total of 6,951,725 MMBtu for coal only.
- 7. Where did the 94% Coal/6% WDF Blend numbers come from that are included in table 3 of the test results (section 4.0)?
- 8. As discussed with Rick Kirby, this application does appear to constitute a modification of the coal yard permit to allow the bunkering of WDF.
- 9. Also, I noted that the reason the test were postponed from 1997 to 1998 was because of handling problems with the WDF that required modifications in the handling yard.
- 10. The test authorization says the test should be conducted with a blend of 8-10% paper pellets, 8-10% WDF, and 80% coal. This test was apparently conducted with 93.7% coal and 6.3% paper pellets.
- 11. Note: this is the first time we have seen the test results of the WDF tests which were originally authorized in March 1997, but postponed until May & June 1998.

If you have any questions, please contact us at (813)-272-5530.

Sincerely,

Leroy Shelton Chief, Air Toxics

TO Gannon Filos
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AUG 12 1998

BUREAU OF AIR REGULATION

August 7, 1998

Mr. Gerald Kissell, P.E. Air Permitting Supervisor Southwest District Florida Department of Environmental Protection 3804 Coconut Palm Drive Tampa, Florida 33619

Via FedEx Airbill No. 805858540259

Re:

Tampa Electric Company (TEC) - F. J. Gannon Station Unit 3 Wood Derived Fuel Test Burn / Air Operating Permit Amendment FDEP Permit No. AO29-172179

Dear Mr. Kissell:

Enclosed for your review and approval are three sealed copies of the permit application to amend the F.J. Gannon Station Unit 3 Air Operating Permit. TEC is requesting that the permit be amended to allow for the firing of a coal and wood derived fuel (WDF) blend in F.J. Gannon Station Unit 3. In support of this request, and in accordance with the March 1997 Letter of Authorization to Conduct a WDF Test Burn, TEC's WDF Test Burn Report is included in this submittal.

TEC's WDF Test Burn commenced on March 4, 1998 and concluded on May 27, 1998 (as approved by the Department). TEC bunkered a total of 932 tons of WDF during the test window. The WDF blend emission tests were conducted on May 13, 1998. The baseline emission tests were conducted on May 20 - 21, 1998. Data gathered during these emission tests reveals that the firing of the WDF blend will not subject this permit amendment to PSD applicability. As such, enclosed are a check made payable to the Department in the amount of \$250.00 and a check made payable to the Environmental Protection Commission of Hillsborough County (EPCHC) in the amount \$960.00.

Thank you for your cooperation to-date in enabling us to complete the WDF Test Burn. I look forward to a continuation of this cooperation as I work with the Department to ensure an expeditious Mr. Gerald Kissell, P.E. August 7, 1998 Page 2 of 2

review and issuance of this permit amendment. Please feel free to call me at (813) 641-5034 if you have any questions regarding this matter.

Sincerely,

Theresa J.L. Watley Consulting Engineer Environmental Planning

EP'gm\TJLW608

Enclosures

c: Mr. Clair Fancy-FDEP

Mr. Al Linero-FDEP (enc)

Mr. Jerry Campbell-EPCHC (enc)



April 21, 1997

Mr. William E. Schroeder
Permitting Engineer
Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

Via Facsimile and U.S. Mail

Re: Tampa Electric Company

F. J. Gannon Unit 3

Operating Permit No. AO29-172179 Wood Derived Fuel/Coal Test Burn

Dear Mr. Schroeder:

The purpose of this letter is to provide notification that Tampa Electric Company (TEC) will begin baseline testing on Gannon Unit 3 from May 5 through May 11, 1997. The emissions performance tests are scheduled to be conducted from May 7 through May 9.

The WDF/coal fuel blend test burn will begin on May 12, 1997. Emissions performance tests are scheduled for May 28 through May 30.

If you have any questions, please feel free to call me at (813) 641-5087.

Sincerely, James Peetro

Laura A. Rector

Engineer - Environmental Planning

EP\gm\LAR085

c: Mr. Clair Fancy - FDEP

Mr. Gerald Kissell - FDEP

Mr. Jerry Campbell - EPCHC

Mr. Richard Kirby - EPCHC

Mr. Sterlin Woodard - EPCHC

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APR 28 1997

BUREAU OF AIR REGULATION



March 31, 1997

Mr. William E. Schroeder
Permitting Engineer
Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

Via FedEx Airbill No. 2561490326

Re: Tampa Electric Company

F. J. Gannon Unit 3

Operating Permit No. AO29-172179
Wood Derived Fuel Test Burn

Dear Mr. Schroeder:

Please find enclosed a proof of publication of the Notice of Intent to Issue Authorization to allow Tampa Electric to test burn a blend of 8%-10% paper pellets, 8%-10% yard trash/wood chips, and 80% coal in F.J. Gannon Unit 3. As specified in the Department's Letter of Authorization, the maximum non-coal material permitted shall be 20% by weight of total fuel burned. The notice was published in the legal ad section of the March 25, 1997 issue of the Tampa Tribune.

If you have any additional questions, please feel free to call me at (813) 641-5087.

Sincerely,

Laura A. Rector

James feeter

Engineer - Environmental Planning

EP\gm\LAR085

Enclosure

c/enc: Mr. Clair Fancy-FDEP

Mr. Gerald Kissell - FDEP

Mr. Jerry Campbell - EPCHC

Mr. Richard Kirby - EPCHC

Mr. Leroy Shelton - EPCHC Mr. Sterlin Woodard - EPCHC APR 0 4 1997

BUREAU OF
AIR REGULATION

Best Available Copy THE TAMPA TRIBUNE **Published Daily**

State of Florida

Tampa, Hillsborough County, Florida

County of Hillsborough \ ss. Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

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n the matter of	STAT	E OF FLO	
vas published in said nev	STAT	E OF FLO	
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County, Florida, and that County, Florida, each da Hillsborough County, Flo	the said newspaper y and has been enter- orida for a period of it further says that sh	has heretofore ed as second cla one year next p	ewspaper published at Tampa in said Hillsborough been continuously published in said Hillsborough lass mail matter at the post office in Tampa, in said preceding the first publication of the attached copy paid nor promised any person, this advertisement for
		25	
sworn to and subscribed			day
oforersonally Knownorersonally Knownorersonal	r Product Identificati	. A.D. 19 <u>9</u> 7	OFFICIAL NOTARY SEAL ALLISON WHITE COMMISSION NUMBER CC429145 MY COMMISSION EXP FEB. 18,1999

NOTICE OF INTENT TO'S
ISSUE AUTHORIZATIONS
The Department of Environ
mental Protection gives notice
of its Intent to issue a Letter of
Authorization to Tampa Electric Company to permit a tes
burn of a fuel blend deriver
from approximately 20% pa
per petilets, yard trash, woo per pellets, yard trash, woo chips, and approximately 80? coal by weight in F.J. Gannas station Unit No. 3. The facilities located at Port Surton, Tampa, Hillisborough County MALING ADDRESS - Tamp Electric Company, Post Office Box 111, Tampa, FL 33401-1 the attention of Laura A. Ret for, Engineer, Environment Planning.
A Best Available Contra Technology (BACT) Contrary and the statement of County County of the County o

DEPARTMENT OF

do Statutes, or a party in aussis invelocition as on othe notive remedy under section 120.573 before the decading to filling a petition. Choosing me diarion will not adversely at fect the right to a hearing medication does not result in settlement. The procedure for petitioning for a hearing medication does not result in settlement. The procedures for petitioning for a hearing medication.

A person whose substantic interests are affected by the Department's proposed per mitting decision may petition for an administrative hearing in accordance with section; 120.569 and 120.57 of the Fibrid as Statutes. The petition must contain the information set forth, below and must be filled contains of 180.50 contains of 180.50 contains of 180.50 contains of 180.50 contains and 180.50 contains of 180.50 contains and 180.50 contains of 180.50 contains and 180.50 contains of 180.50 contains filled.50 contain

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(d) A statement of the most
of facts disputed by the p
storer, if any;
(e) A statement of the sq

that the pattioners wavenut reversal or in the Department for a proposed acids (f) A statement identification or proposed acids (f) A s s or statutes that partment's action or p action; and (g) A statement of sought by the petiti

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(g) A stutement of the retief sought by the pertitioner, stating precisely the action that the pertitioner wants the Department to take with respect to the action or proposed action addressed in the attached letter.

Because the contensivative hearing process of designed to formulate that agency action, the filling of a periment's fined open that the department's fined open that the department's fined open that the department's fined open that the process open that the department of the position related by any such fined department on the processing of the processi

A person whose substantial interests are diffected by the Department's proposed permitting decision, may elect to pursue medication, may elect to pursue medication by esting all parties to the proceeding to agree to such medication and by filling with the Department or request for medication and the written ognement of all such porties to medicate the written operation of auch porties to medicate and ognement must be field in vicestived by the Office of General Coursel of the Department of 3900 Commonwealth Boulevard, Molf Storio, 33, Telishossee, Florid, 32594-3000, by the source dead-

A request for mediation must contain the following in

(a) The name, address, and telephone number of the person requesting medicition and that person's representative, it onv:

intery agency action; (c) A statement of the roller sought and

(d) Either on explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester house in the petition for the region of the reg

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation:

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified

(c) The agreed allocation of the costs and fees associated with the medication:

with the integration (d) The agreement of the parties of the confidentiality of discussions and documents introduced during mediation; (e) The date, time and place of the first mediation session, or a deadline for holding the first session, it no mediator has yet

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) The signatures of all parfles or their authorized reprementations.

As provided in Section 120,573 of the Florido Stolutes.

the timely agreement of all porties to mediate will sol the time illmitrations impassed by sections 120.59 and 120.57 ex requesting and holding an administrative hearing. Unless otherwise agreed by the parents of the securities of the execution of the agreement. If mediation results in estitement of the administrative dispute, the Department must enter a final arder incorporating the agreement of the particle. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right for petition for a hearing only in accordance with the results and notified in the administrative hearing model in the petition for a hearing only in accordance with the requirements for the dispute, the Department of the dispute, and the notice will specify the resulting that the will apply apply applied the resulting that the milk apply apply and the motice will specify the resulting that there will apply apply and the notice will specify the resulting that there will apply apply and the notice will specify the desirables that there will apply apply and the notice will specify the administrative them the will apply apply and the notice will specify the administrative them will apply the desirables that there will apply the desirables that there will apply the administrative them will apply the administrative them.

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in buddition to this doors, person subject to regulation has a right to apply for the requirements of particular the requirements of particular rules, on certain conditions under section 120-542 of the Florido Statutes. The relie provided by this state statut, applies only to state rules, no statutes, and not to any feder of regulatory requirements Applying for a variance of extend the time for filling where the state of the partition for an administrative learning or examining any off or right that a person more

proposed in this notice of in-

The application for a variance or waiver is made by Riling a pertition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Amelionwealth Boulevard, Ameliontion 35, Tallichassee, Florida 22399-3000.

The petition must specify the tollowing information:

(a) The name, address, and telephone number of the peti-

(b) The name, address, and tetephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or partion of a rule from which a variance or waiver is requested:

(d) The challent to the statute underlying (Implemented by) the rule identified in (c) above (e) The type of action request-

(f) The specific facts the would justify a variance a walver for the perithoner;
(g) The reason why the variance or walver would serve the purposes of the underlying statute (implemented by the periods).

(h) A statement whether the variance or waiver is permonent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver re-

quested.
The Department will grant a variance or waver when the petition demonstrates both that the application or rule would create a substantial hardship or violate principles of fairness, as each to those terms is defined in section 120.52(s) of the Fierdo Statutes, and that the purpose of the undertying statute will be or has been achieved by

Persons subject to regular too paraunt to any tederally delegated or approved air program should be evere that Fondia is specifically not authorized to issue variances or walvers from any requirements of the program remain fully or of EPA and by the person under the Cean Air Act unless and until Administrator soul until Administrators are until administrators are walver in accordance with the procedures of the federal program. DEPARTMET CONTACT: William E. Schroeder, Permitting Englines.

Best Available Copy



January 22, 1997

Copy: Syed (plea review + alorse Bill Schneder)

RECEIVED

JAN 27 1997

BUREAU OF
AIR REGULATION
AIR REGULATION

Via FedEx Airbill No. 7748636361

Mr. William E. Schroeder
Permitting Engineer
Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Tampa Electric Company

F. J. Gannon Unit 3

Operating Permit No. AO29-172179 Wood Derived Fuel Test Burn Submittal of Additional Information

Dear Mr. Schroeder:

As discussed in recent meetings and telephone conversations between the Florida Department of Environmental Protection (FDEP), the Environmental Protection Commission of Hillsborough County (EPCHC) and Tampa Electric Company (TEC), additional emissions calculations were deemed necessary to provide further reasonable assurance regarding the proposed test burn. To address this need, TEC compiled a listing of emission factors for the pollutants of concern that may be present in the emissions from the proposed coal/wood derived fuel (WDF) blend, calculated emission rates for these pollutants of concern from the proposed coal/WDF blend, conducted dispersion modeling to determine the ambient impact of each pollutant of concern and compared the modeled ambient impact for each pollutant of concern to the FDEP's draft guidance on ambient reference concentrations (ARC). Tables summarizing this information are enclosed for your review.

Several assumptions were made in the calculation of this information and should be considered when reviewing the enclosed documents. These assumptions are listed below:

- The emission factors for each component of the fuel blend (i.e., coal, paper pellets, and yard waste/wood chips) were obtained from AP-42. If an emission factor was not available from AP-42, an alternate emission factor was obtained from FCG/EPRI data. In some cases emission factors were not available for certain pollutants. The various emission factors for each component of the fuel blend are reflected by pollutant in Enclosure 1.
- A scenario was developed to establish a "worst case" burn reflective of TEC's intent, which is to obtain the operational flexibility to burn 80% coal and up to 20% of WDF. The "worst case" was determined by comparing the emission factors of each component of the fuel blend by pollutant. The higher emission factor of the fuel blend components (i.e., paper pellets, or yard waste/wood chips) was then chosen to represent a full 20% of the proposed burn while

coal emission factor was used for the remaining 80%. Where no emission factor was available for the alternative fuel, a coal emission factor was used. Similarly, where no emission factor was available for coal, an alternate emission factor was used. This comparison information is detailed in Enclosure 1.

- Using this "worst case" scenario, emission rates were calculated based on "worst case" emission factors and proposed fuel usage. These calculations are provided in Enclosure 2.
- Using these emission rates and the EPA approved Industrial Source Complex model (ISCST3), potential impacts to ambient air quality were determined and compared to the FDEP draft guidance ARC's. The modeling was conducted using the regulatory default options and 1991 meteorological data from Tampa and Ruskin. A polar receptor grid was used, extending from the property boundary to 50 kilometers. A comparison of the maximum modeled ambient concentrations to the draft ARC's is provided in Enclosure 3.

This analysis demonstrates that firing coal/WDF blend will not cause the exceedance of any ARC of concern under the "worst case" test burn scenario. Given this data, all parties should be reasonably assured that the proposed test burn will not cause detrimental environmental effects.

If you have any additional questions, feel free to contact me at (813)641-5087. Thank you for your continued assistance on this project.

Sincerely, Laura a. Dector

Laura A. Rector

Engineer - Environmental Planning

EP\gm\LAR078

Enclosures

c/enc: Mr. Clair Fancy-FDEP

Mr. Gerald Kissell - FDEP

Mr. Jerry Campbell - EPCHC

Mr. Richard Kirby - EPCHC

Mr. Leroy Shelton - EPCHC

Mr. Sterlin Woodard - EPCHC

cc: 5. arif

Gannon Unit 3 Emission Factor Comparison											
	Coal			Wood Waste (WW)		Refuse-Derived Fuel (RDF)					
	Uncontrol	led Emissio			rolled Emission			Uncontrolled Emission Factor			gest
D. H. A.	174+	Heat	Gannon	AP-42	Heat Content	Gannon	AP-42	Heat Content	Gannon		n Factor
Pollutant	Factor*	Content	Factor	Factor	Adjustment**	Factor	Factor	Adjustment***	Factor	Source	Value
	(lb/10E12 Btu)	(Btu/lb)	(lb/ton)	(lb/ton)		(lb/ton)	(lb/ton)		(lb/ton)	<u> </u>	(lb/ton)
Acrolein	No Factor	13,769	No Factor	4.0E-06	1.79	7.17E-06	No Factor	1.47	No Factor	ww	7.17E-06
Arsenic	115	13,769	3.17E-03	8.8E-05	1.79	1.58E-04	5.94E-03	1.47	8.71E-03	RDF	8.71E-03
Benzene	3.8	13,769	1.05E-04	3.6E-03	1.79	6.45E-03	No Factor	1.47	No Factor	WW	6.45E-03
Beryllium	81	13,769	2.23E-03	No Factor	1.79	No Factor	No Factor	1.47	No Factor	Coal	2.23E-03
Chromium	1,502	13,769	4.14E-02	4.6E-05	1.79	8.25E-05	1.40E-02	1.47	2.05E-02	Coal	4.14E-02
Dioxins/Furans	2.0E-06	13,769	5.51E-11	4.1E-08	1.79	7.35E-08	9.47E-06	1.47	1.39E-05	RDF:	1.39E-05
Fluorides	9,400	13,769	2.59E-01	No Factor	1.79	No Factor	No Factor	1.47	No Factor	Coal	2.59E-01
Formaldehyde	221	13,769	6.09E-03	6.6E-03	1.79	1.18E-02	No Factor	1.47	No Factor	WW	1.18E-02
Hydrogen Chloride	78,800	13,769	2.17E+00	7.8E-03	1.79	1.40E-02	6.97E+00	1.47	1.02E+01	RDF	1.02E+01
Lead	507	13,769	1.40E-02	3.1E-04	1.79	5.56E-04	2.01E-01	1.47	2.95E-01	RDF	2.95E-01
Mercury	16	13,769	4.41E-04	6.5E-06	1.79	1.17E-05	5.5E-03	1.47	8.07E-03	RDF	8.07E-03
Naphthalene	No Factor	13,769	No Factor	2.3E-03	1.79	4.12E-03	No Factor	1.47	No Factor	WW	4.12E-03
Nickel	1,290	13,769	3.55E-02	5.6E-04	1.79	1.00E-03	4.36E-03	1.47	6.40E-03	Coal	3.55E-02
Non-methane TOC	****	13,769	1.10E-01	No Factor	1.79	No Factor	No Factor	1.47	No Factor	Coal	1.10E-01
Phenol	No Factor	13,769	No Factor	3.9E-04	1.79	6.99E-04	No Factor	1.47	No Factor	ww	6.99E-04
Vanadium	No Factor	13,769	No Factor	1.2E-04	1.79	2.15E-04	No Factor	1.47	No Factor	ww	2.15E-04
Zinc	No Factor	13,769	No Factor	4.4E-03	1.79	7.89E-03	No Factor	1.47	No Factor	ww	7.89E-03

^{*}From AP-42, except benzene, dioxin/furan, fluorides, and hydrogen chloride from FCG/EPRI.

Fluorides emission factor based on fluoride content in coal of 80 ppm.

Hydrogen chloride factor based on chloride content in coal of 846 ppm.

^{**}Heat content adjustment based on dividing actual heat content of wood-derived fuel (8,068 Btu/lb) by heat content of AP-42 fuel (4,500 Btu/lb).

^{***}Heat content adjustment based on dividing actual heat content of wood-derived fuel (8,068 Btu/lb) by heat content of AP-42 fuel (5,500 Btu/lb).

^{****}AP-42 emission factor provided as lb/ton.

Gannon Unit 3 Calculated Noncriteria Pollutant Emission Rates for Coal/WDF Blend								
				I I t 11	4 Dellasas			
		Fuel Usage		Uncontrolled Emission			Controlled	
Pollutant	Coal	WDF	Total	Coal	WDF	Dalla	utant Emission	Data*
ronutant	(lb/hr)	(lb/hr)	(lb/hr)	(lb/ton)	(lb/ton)	(lb/hr)	(g/sec)	(tpy)
	(10/111)	(10/111)	(10/111)	(10/tOII)	(10/tOII)	(10/111)	(g/scc)	((py)
Acrolein	101,275	25,319	126,594	No Factor	7.17E-06	4.54E-04	5.72E-05	1.99E-03
Arsenic	101,275	25,319	126,594	3.17E-03	8.71E-03	2.71E-03	3.41E-04	1.19E-02
Benzene	101,275	25,319	126,594	1.05E-04	6.45E-03	8.70E-02	1.10E-02	3.81E-01
Beryllium	101,275	25,319	126,594	2.23E-03	No Factor	1.41E-03	1.78E-04	6.18E-03
Chromium	101,275	25,319	126,594	4.14E-02	2.05E-02	2.36E-02	2.97E-03	1.03E-01
Dioxins/Furans	101,275	25,319	126,594	5.51E-11	1.39E-05	1.76E-06	2.22E-07	7.71E-06
Fluorides	101,275	25,319	126,594	2.59E-01	No Factor	1.64E+01	2.07E+00	7.18E+01
Formaldehyde	101,275	25,319	126,594	6.09E-03	1.18E-02	4.58E-01	5.77E-02	2.01E+00
Hydrogen Chloride	101,275	25,319	126,594	2.17E+00	1.02E+01	2.39E+02	3.01E+01	1.05E+03
Lead	101,275	25,319	126,594	1.40E-02	2.95E-01	4.44E-02	5.60E-03	1.95E-01
Mercury	101,275	25,319	126,594	4.41E-04	8.07E-03	1.24E-01	1.57E-02	5.45E-01
Naphthalene	101,275	25,319	126,594	No Factor	4.12E-03	2.61E-01	3.29E-02	1.14E+00
Nickel	101,275	25,319	126,594	3.55E-02	6.40E-03	1.88E-02	2.37E-03	8.23E-02
Non-methane TOC	101,275	25,319	126,594	1.10E-01	No Factor	6.96E+00	8.77E-01	3.05E+01
Phenol	101,275	25,319	126,594	No Factor	6.99E-04	4.42E-02	5.57E-03	1.94E-01
Vanadium	101,275	25,319	126,594	No Factor	2.15E-04	1.36E-04	1.71E-05	5.96E-04
Zinc	101,275	25,319	126,594	No Factor	7.89E-03	4.99E-03	6.29E-04	2.19E-02

^{*99} percent control assumed for all metals except mercury.

Gannon Unit 3 Ambient Reference Concentration Comparison							
	Modeled	_	Modeled		Modeled		
	8-Hour	8-Hour	24-Hour	24-Hour	Annual	Annual	
	Ambient	Ambient	Ambient	Ambient	Ambient	Ambient	
	Impact	Reference	Impact	Reference	Impact	Reference	
Pollutant	ISCST3	Concentration	ISCST3	Concentration	ISCST3	Concentration	
	(ug/M3)	(ug/M3)	(ug/M3)	(ug/M3)	(ug/M3)	(ug/M3)	
Acrolein	0.00003	2.3	0.00002	0.50	<0.00001	2.00E-02	
Arsenic	0.00019	0.1	0.00011	0.02	1.00E-05	2.4E-04	
Benzene	0.00608	30	0.00344	7.00	3.70E-04	1.2E-01	
Beryllium	0.00010	0.02	0.00006	0.01	1.00E-05	4.2E-04	
Chromium (III)*	0.00164	5	0.00093	1.2	1.00E-04	1.00E+03	
Chromium (VI)**	0.00016	0.5	0.00009	0.1	1.0E-05	8.3E-05	
Dioxins/Furans	< 0.00001	None	< 0.00001	None	1.00E-08	2.20E-08	
Fluorides	1.14	25	0.65	6.00	6.97E-02	None	
Formaldehyde	0.03	3.7	0.02	0.90	1.94E-03	7.7E-02	
Hydrogen Chloride	16.63	70	9.41	17	1.01E+00	7.0E+00	
Lead	0.00309	0.5	0.00175	0.1	1.90E-04	9.0E-02	
Mercury	0.00867	1	0.00491	0.2	5.30E-04	None	
Naphthalene	0.02	500	0.012	119	1.29E-03	None	
Nickel	0.0013	10	0.00074	2.4	8.00E-05	4.2E-03	
Non-methane TOC	No Result	None	No Result	None	No Result	None	
Phenol	0.00308	190	0.00174	45	1.90E-04	3.0E+01	
Vanadium	0.00001	0.5	0.00001	0.1	<0.00001	2.0E+01	
Zinc	0.00035	50	0.00020	12	2.00E-05	None	

^{*}Conservatively assumes that all emitted chromium is trivalent.

^{**}Conservatively assumes that 10 percent of emitted chromium is hexavalent.



TAMPA ELECTRIC

March 19, 1998

Mr. Lenon Anderson
Title V Section
Florida Department of Environmental Protection
Twin Towers Office Building
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via FedEx Airbill No. 800926219607

Re: Tampa Electric Company F. J. Gannon Station

Draft Title V Air Operation Permit FDEP File No. 0570040-002-AV

Dear Mr. Anderson:

Please find enclosed TEC's detailed comments regarding the above referenced draft Title V permit. As we discussed, the SO₂ modeling analysis will be submitted under separate cover. In addition, TEC requests that all test windows be ninety (90) days and Gannon Units 1-6 test windows correspond with the Acid Rain RATA testing requirements as follows:

Emission Unit	Annual Date	Frequency
Gannon Unit 1	1st Quarter	Annually
Gannon Unit 2	3rd Quarter	Annually
Gannon Unit 3	4th Quarter	Annually
Gannon Unit 4	2nd Quarter	Annually
Gannon Unit 5	1st Quarter	Annually
Gannon Unit 6	1st Quarter	Annually

Please feel free to telephone me at (813) 641-5039, if you have any questions. Thank you.

, ,

Jamice K./Taylor

Senior Engineer

Environmental Planning

EP\gm\UKT830

Enclosure

c/enc: Mr. Scott Sheplak, FDEP-Tallahassee

Mr. Jerry Kissel, FDEP-SW District Mr. Richard Kirby, EPCHC -

Via FedEx Airbill No. 5060867851

xc: Al Linero

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

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MAR 2 0 1998

BUREAU OF AIR REGULATION

(813) 228-4111

TAMPA ELECTRIC COMPANY COMMENTS REGARDING THE TITLE V AIR OPERATION PERMIT FOR F.J. GANNON STATION FDEP FILE NO. 0570040-002-AV

Table of Contents

TEC Comment 1:

TEC requests the following change to the Table of Contents:

III. Emissions Units and Conditions

E. Coal Fuel Yard

Section I. Facility Information.

TEC Comment 2:

TEC requests the following changes to Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions:

- -008 Fuel Coal Yard. . .
- -013 Unit No. 1 Fuel Coal Bunker with Roto-Clone
- -014 Unit No. 2 Fuel Coal Bunker with Roto-Clone
- -015 Unit No. 3 Fuel Coal Bunker with Roto-Clone
- -016 Unit No. 4 Fuel Coal Bunker with Roto-Clone
- -017 Unit No. 5 Fuel Coal Bunker with Roto-Clone
- -018 Unit No. 6 Fuel Coal Bunker with Roto-Clone

Section II. Facility-wide Conditions.

TEC Comment 3:

Consistent with the previously issued Title V Air Operations Permit for Hookers Point Station, TEC requests the Appendix E-1, List of Exempt Emissions Units and/or Activities, as cited in Condition 5, be modified as follows to include:

- 13. Storage tanks less with than 550 gallons capacity
- 14. Inorganic substance storage tanks with 550 gallon or greater capacity and not containing a hazardous air pollutant (HAP)
- 15. No. 2 fuel oil storage tanks
- 16. Equipment used for steam cleaning

17. Turbine vapor extractors

TEC Comment 4:

TEC requests Condition 7 be changed as follows:

(a) Attend to accidental spills (solid fuel coal and fly ash) promptly and effectively.

TEC Comment 5:

TEC requests Condition 7(b) be deleted. The specific conditions for each steam generator include required reasonable precautions to minimize particulate matter emissions. Condition 7(b) duplicates these requirements with less specific language that could cause confusion.

TEC also notes that the cited underlying rule for Condition 7(b), 62-296.320(4)(c)(2), F.A.C., applies to unconfined particulate matter emission sources. This rule is not applicable to the steam generators because these emissions units are confined particulate matter emission sources.

Section III. Regulated Emissions Units Conditions

TEC Comment 6:

TEC requests that Emission Unit 3 description be clarified as follows because the heat recovery system is no longer in service:

.... and is of the cyclone firing type, equipped with an optional flue gas recirculation (heat recovery) system to maintain steam temperature at low loads.

TEC Comment 7:

The subsection A permitting note references these units as Phase I Acid Rain units. These units are regulated under the Phase II Acid Rain rules only.

TEC Comment 8:

TEC requests that all emission units listed in Subsections A, B and C be combined into Subsection A. This consolidation will clarify the specific permit condition requirements for these emission units as well as streamline the permit. TEC believes this approach is appropriate because these units have the same basic method of operations.

TEC Comment 9:

TEC requests Condition A.1 be changed as follows:

The maximum permitted heat input rate on a monthly average basis for each unit is as follows: . . .

TEC Comment 10:

TEC requests Condition A.2 be changed to read as follows to recognize that coal and ignition oil are jointly burned, to allow for the injection of nonhazardous boiler cleaning waste, and to allow on-specification used oil (including oily soil) combustion during normal operations:

- (a) Normal operation: The only fuels allowed to be burned are coal and on-specification used oil.
- (b) Startup; shutdown; malfunctions: In addition to the fuels allowed to be burned during normal operations, each unit may also burn new No. 2 fuel oil during startup, shutdown and malfunctions. This includes but is not limited to the emission unit, a new cyclone/mill or combustion stabilization.
- (c) The injection of nonhazardous boiler chemical cleaning waste is allowed in each unit.

TEC Comment 11:

Consistent with the existing operating permits for F.J. Gannon Station, TEC requests the following statement be added to Condition A.3:

A test under sootblowing conditions which demonstrates compliance with a non-sootblowing limitation will be accepted as proof of compliance with that non-sootblowing limitation.

In addition, TEC requests that only one visible emissions test be done under sootblowing conditions. TEC believes duplicate testing provides no environmental benefit.

TEC Comment 12:

TEC requests Condition A.4 be changed as follows to clarify design fuel consumption rates:

- A. Process System Performance Parameters:
- 1. Source Designator: Units Nos. 1-6
- 2. Design Fuel Consumption Rate at Maximum Continuous Rating:

Unit	Tons/hr (fuel coal)	Fuel Heat Content (Btu/lb)
1	50	<u>12,570</u>
2	51	<u>12,570</u>
3	65	<u>12,300</u>
4	80	<u>11,699</u>

5 93.4 <u>12,227</u> 6 151.4 12,543

All Units:

On-specification used oil - 48 gallons per minute/per boiler; Max 1,000,000 gal/yr per station

Monthly Recorded or Inspection/Maintenance

Inspect insulator compartment heaters/blowers.

Units 1-4 Inspect insulator compartment heaters/blowers.

Units 5-6 Inspect penthouse pressurizing fan filters.

TEC Comment 13:

TEC requests Condition B.3 be eliminated because enforcing this condition is neither necessary nor practical. The quantity of SO₂ generated from on-specification used oil combustion is negligible compared to the quantity of SO₂ generated from coal combustion. Segregating and determining the quantity of SO₂ generated from the combustion of each fuel is not possible.

TEC Comment 14:

TEC requests Condition B.6 be changed to Condition A.6 and amended as follows because we believe it will provide clarity and we know of no regulatory requirement mandating recordkeeping completion.:

- b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by <u>TECO</u> the F.J. Gannon Station in the production and distribution of electricity, not to exceed 1,000,000 gallons during any consecutive 12 month period.
- e. Testing requirements*: The owner or operator shall sample and analyze each batch of used oil to be burned . . .
- *Used oil parameters may be characterized by generator knowledge.
- f. Record Keeping Requirements: The owner or operator....
 - (1) The gallons of on-specification used oil generated and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
 - (2) Consecutive 12-month period. (This record shall be completed no later-than the fifteenth day of the succeeding month.)

TEC Comment 15:

TEC requests the brief description of the combustion turbine in subsection D be clarified as follows:

This emissions unit is a simple cycle combustion turbine and is designated Combustion Turbine #1 7. . . .

TEC Comment 16:

TEC recommends Condition D.7 be changed as follows to promote clarity:

Excess emissions from this these emissions units resulting from . . .

TEC Comment 17:

TEC requests this condition D.9 be changed as follows:

The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery or by contract specifications.

TEC Comment 18

TEC requests Condition D.10 be deleted as unnecessary.

TEC Comment 19:

TEC recommends that Condition D.16 be changed as follows to promote clarity:

Visible Emissions Testing - Annual: By this permit, annual emissions compliance testing for visible emissions is not required for those emissions units while burning-e: only liquid fuels for less than 400 hours per year.

TEC Comment 20:

TEC requests Condition D.22 be clarified as follows:

In order to document compliance with the visible emission testing exemption provided in Specific Condition No. D.16 D.5, ...

TEC Comment 21:

TEC requests the brief description of the fuel yard in Subsection E be clarified as follows:

-008 F.J. Gannon Station Fuel Coal Yard

For the operation of a <u>fuel</u> bituminous coal yard serving the <u>F.J.</u> Gannon Station boiler units 1 through 6, yard activities including barge (east and west) and railcar unloading of coal, truck/<u>barge</u> unloading of <u>flux</u> limestone or iron ore, and transfer and storage

of these materials. The iron ore is shipped, stored, and handled in the same manner as limestone. . . .

Source Designator Barge to East Grab Bucket	Particulate Control Method Grab Bucket	Efficiency Rating at Design Capacity	Maximum Design Material Handling <u>Rate (TPH)</u> 1500
East Grab Bucket to East Hopper	Side Enclosure	25%	1500
Barge to West - Continuous Unloader	Enclosure	40%	1500
Barge to West Grab Bucket	Grab Bucket		1500
West Grab Bucket to to West Hopper	Side Enclosure	25%	1500
• • •			
West Hopper to Feeder			

Live Limestone Fluxing Stockpile

TEC Comment 22:

TEC requests Condition E.1 be clarified as follows:

Permitted Capacity: The maximum permitted process rate is 2.85 million tons/year of coal.

TEC Comment 23:

TEC requests Condition E.4 be deleted because demonstrating compliance with the stated condition is not possible.

TEC Comment 24:

TEC recommends specific Condition E.5., be deleted because the west grab bucket has been retired.

TEC Comment 25:

TEC requests Condition E.8 be clarified as follows:

B. Inspection and Maintenance Procedures:

The <u>fuel</u> eoal yard particulate control equipment <u>shall</u> receive regular preventative maintenance as follows: . . .

TEC Comment 26:

TEC requests that Condition E.11 be deleted. All permit modification notifications will be submitted to FDEP, consistent with the Title V Air Operation Permit program.

TEC Comment 27:

TEC requests that Condition E.14 be deleted. This condition is no longer applicable to the fuel yard operations.

TEC Comment 28:

TEC requests that Condition E.15 be deleted. This condition is no longer applicable because the west grab bucket has been retired.

TEC Comment 29:

TEC requests the brief description of the Units 5-6 Fly Ash Silo (No. 1) in Subsection G be clarified as follows:

No. 2) may be routed via gravity flow to the pugmill where it is "conditioned" by wetting with water and gravity fed into open bed trucks. The fly ash is then transported to an off-site consumer. Fly ash may also be conveyed from tanker trucks to Fly Ash Silo No. 1 and from Fly Ash Silo No. 1 to Fly Ash Silo No. 2. . . .

TEC Comment 30:

TEC requests the brief description of the Units 1-4 Fly Ash Silo (No. 2) in Subsection H be clarified as follows:

... In addition, fly ash from silo No. 2 may be routed to the pugmill at F.J. Gannon Station Silo No. 1 where it is "conditioned" by wetting with water and gravity fed into open bed trucks. The fly ash is then transported to an off-site consumer. Fly ash may also be conveyed from tanker trucks to Fly Ash Silo No. 2 and from Fly Ash Silo No. 2 to Fly Ash Silo No. 1...

TEC Comment 31:

TEC requests the brief description of the fuel bunkers with Roto-Clones in subsection I be clarified as follows:

For the operation of F.J. Gannon station Units 1-6 <u>fuel</u> eoal bunkers with exhaust fan/cyclone collector (Roto-Clone) controlling dust emissions from each unit's respective bunker, two moving transfer stations via their respective conveyor belts <u>fuel</u> eoal through enclosed chutes to each of the six bunkers. <u>Fuel</u> Coal bunkers No. 1-4 and 6 are each equipped with a 9,600 ACFM American Air Filter Company Type D Roto-Clone to abate dust emissions during ventilation. <u>Fuel</u> Coal bunker No. 5 is equipped with a 5,400 ACFM Type D Roto-clone. A number of vent pipes convey air from each bunker to a Roto-Clone during particulate removal. Particulate matter removed by the Roto-Clones is returned to a <u>fuel</u> eoal bunker via a hopper and return line. Units <u>No.</u> 1-6 <u>fuel</u> eoal bunkers are situated in a west to east fashion. Unit <u>No.</u> 1 fuel eoal bunker is located furthest east.

TEC Comment 32:

TEC requests Condition I.2 be clarified as follows:

. . . the maximum allowable particulate matter emission rate from each of the six <u>fuel</u> eoal bunkers shall not exceed 0.99 ton/year.

TEC Comment 33:

TEC requests Condition I.3 be clarified as follows:

Visible emissions from each of the six <u>fuel</u> coal bunkers shall not be equal to or greater than 20% opacity.

TEC Comment 34:

TEC requests that Condition I.4 be deleted to avoid confusion because this requirement is adequately addressed in Subsection K.

TEC Comment 35:

TEC requests Condition I.5 be deleted because each rotoclone emits less than 1 tn/yr and therefore by regulations are exempt from RACT requirements.

TEC Comment 36:

TEC requests Condition J.6 be changed as follows:

Visible emissions shall not exceed 20 percent opacity, except for one six two-minute period per hour during which the opacity shall not exceed 27 40 percent.

TEC Comment 37:

TEC notes that Condition J.19.2 contains a requirement c., but does not have an a. nor b. TEC requests the opportunity to review any missing permit conditions prior to permit finalization.

TEC Comment 38:

TEC notes that Condition J.21(a) does not contain a requirement 1. but does contain requirements 2. and 3. TEC requests the opportunity to review any missing permit conditions prior to permit finalization.

TEC Comment 39:

TEC requests that Condition J.22 be modified as follows:

The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery or by contract specified.

TEC Comment 40:

TEC requests that Condition J.30 be deleted. New No. 2 oil, which is fired only during startup, makes a negligible contribution to emissions from these emissions units. the cost of installing and maintaining new flow monitoring equipment is not justified by the benefit received.

TEC Comment 41:

TEC requests the portion of Condition J.33.e (reporting requirements) requiring the quarterly reporting to EPC be deleted because this requirement is unnecessary.

TEC Comment 42:

TEC requests the following changes to Subsection K. Common Conditions:

- -013 Unit No. 1 Fuel Coal Bunker with Roto-Clone
- -014 Unit No. 2 Fuel Coal Bunker with Roto-Clone
- -015 Unit No. 3 Fuel Coal Bunker with Roto-Clone
- -016 Unit No. 4 Fuel Coal Bunker with Roto-Clone
- -017 Unit No. 5 Fuel Coal Bunker with Roto-Clone
- -018 Unit No. 6 Fuel Coal Bunker with Roto-Clone

TEC Comment 43:

TEC requests Condition K.2. be clarified to include the rotoclones.

TEC Comment 44:

TEC requests Condition K.3. be modified to allow for the testing of two (2) rotoclones annually.



Department of Environmental Protection

Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Virginia B. Wetherell Secretary

INTENT TO ISSUE

CERTIFIED MAIL

In the Matter of an Application for Permit by:

Mr. Gregory M. Nelson, P.E. Manager, Erivironmental Planning Tampa Electric Company 6944 US Highway 41 North Apollo Beach, Florida 33572-9200 DEP File No.: 0570040-008-AC

County: Hillsborough

RECEIVED

JAN 1 9 1999

BUREAU OF AIR REGULATION

The Department of Environmental Protection gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Tampa Electric Company, applied on August 10, 1998 to the Department of Environmental Protection for a construction modification permit to allow for the combustion of a coal/wood-derived fuel (WDF) blend in Unit 3 at the F.J. Gannon Station located on Port Sutton Road in Tampa.

The Department has permitting jurisdiction under Section 403.087, Florida Statutes (F.S.). The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

The Department intends to issue this permit based on the belief reasonable assurances have been provided to indicate the proposed project will comply with the appropriate provisions of Florida Administrative Code (F.A.C.) Chapters 62-204 through 62-297 & 62-4.

Pursuant to Section 403.815, F.S., and Rule 62-110.106, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice will be published one time only within 30 days of receipt of this Intent to Issue, in the legal ad section of a newspaper of general circulation in the area affected. For the purposes of this rule "publication in a newspaper of general circulation in the affected area" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031. F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed above. The applicant shall provide proof of publication to the

Department, at 3804 Coconut Palm Drive, Tampa Florida 33619 within 7 days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedure for petitioning for a hearing are set forth below.

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 14 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), F.S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within 14 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, 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, as well as the rules and statutes which entitle the petitioner to relief; and
- (f) A demand for relief.

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 of intent. 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.

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 EPA and by

the person under the Clean Air Act unless and until Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Any person listed below may request to obtain additional information, a copy of the application (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), all relevant supporting materials, and all other materials available to the Department that are relevant to the permit decision. In addition any person may send written comments on the proposed permitting action. All requests and comments should be sent to this office at the address referenced above to the attention of Mr. Jerry Kissel (phone no. 813-744-6100 ext. 107) referencing Permit File No. 0570040-008-AC. All comments received within 14 days of receipt of this Intent to Issue will be considered in the Department's final determination.

Executed in Tampa, Florida.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

For Richard D. Garrity, Ph.D.

Director of District Management

Attachment DZ/

copies to:

- DARM, Bureau of Air Regulation, Title V Permit Section, Tallahassee
- Environmental Protection Commission of Hillsborough Co., Air Management Division

CERTIFICATE OF SERVICE

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

JAN 1 1 1999

Date

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Protection gives notice of its intent to issue an air pollution permit (0570040-008-AC) to Tampa Electric Company for the modification of the operating limitations on Unit 3 at their F.J. Gannon Station power generation facility located on Port Sutton Road in Tampa, Hillsborough County. The proposed modification is to allow for combustion of a coal and wood derived fuel (i.e. paper pellets, yard waste and/or wood chips) blend in Unit 3. (APPLICANT MAILING ADDRESS: Tampa Electric Company, 6944 US Highway 41 North, Apollo Beach, Florida, 33572-9200 to the attention of Mr. Gregory M. Nelson, Manager, Environmental Planning).

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedure for petitioning for a hearing are set forth below.

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 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), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., 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. 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, as well as the rules and statutes which entitle the petitioner to relief; and
- (f) A demand for relief.

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 permit. 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.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at 8407 Laurel Fair Circle, Tampa, Florida.

Any person may request to obtain additional information, a copy of the application (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), all relevant supporting materials, a copy of the permit draft, and all other materials available to the Department that are relevant to the permit decision. Additionally, the Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of "Public Notice of Intent to Issue Permit." Requests and written comments filed should be provided to the Florida Department of Environmental Protection at 3804 Coconut Palm Drive, Tampa, FL 33619 to the attention of Mr. Jerry Kissel (phone no. 813-744-6100 ext. 107) referencing Permit File No. 0570040-008-AC. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.



Department of Environmental Protection

DRAFT

Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Virginia B. Wetherell Secretary

PERMITTEE:

Tampa Electric Company 702 North Franklin Street Tampa, Florida 33602 **Effective Date:**

Permit No: 0570040-008-AC

County: Hillsborough

Expiration Date: 12/31/1999

Project: F.J. Gannon Station Unit No. 3 WDF Modif.

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:

For the modification of the F.J. Gannon Station Unit 3 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.

Location: Port Sutton Road, Tampa

UTM: 17-360.1 E 3087.5 N

Facility ID No: 057004 Emission Unit ID No: 003

<u>Note</u>: Please reference Permit No. and Emission unit ID No. in all correspondence, test report submittals, applications, etc.

Modifies Permit No.: AO29-172179

DRAFT

Permittee

Tampa Electric Company

Permit No.: 0570040-008-AC

Project: Gannon Unit 3 WDF Modif.

Specific Conditions:

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.]

<u>Note</u>: The following conditions modify the conditions of operation permit AO29-172179 where applicable. All other conditions of the above operation permit continue to apply.

Operation Limitations - Fuels

3. This unit is permitted to be fired on coal or a coal / wood-derived fuel (WDF) blend with the following restrictions:

- A. The maximum amount of WDF fired shall not exceed 10% of the fuel fired in the boiler on a weight basis. (* 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. Yard Trash 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.

(Note: The above definitions are the same as those included in the Department's WDF Test Burn Authorization letter dated 3/18/97.)

Tampa Electric Company

Permit No.: 0570040-008-AC

Project: Gannon Unit 3 WDF Modif.

Specific Conditions:

DRAFT

3. (continued)

C. Based upon the operating conditions during the (March 4 and May 27) 1998 WDF test burn, the following additional WDF usage restrictions apply <u>until additional compliance stack testing is done during firing of different WDF blend ratios and WDF types</u>.

- i. WDF is limited to a maximum of 7.0% of the fuel fired in the unit on a weight basis (based on tested WDF blend ratio (6.3%) + 10% = 7.0%).
- ii. WDF is limited to paper pellets only.

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 Unit 3. 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 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. 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 F.J. Gannon Unit 4 in approving changes to WDF types and blend ratios for Unit 3 in lieu of additional testing on Unit 3.

Permit No.: 0570040-008-AC Project: Gannon Unit 3 WDF Modif.

Specific Conditions:

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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 this project, 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 that result in a final waste stream that contains less than 5% non-paper materials. 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.

[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]

Additional Recordkeeping Requirements

4. In order to document compliance with Specific Condition No. 3, the permittee shall maintain <u>daily</u> records for Unit 3 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 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

Permittee

Tampa Electric Company

Permit No.: 0570040-008-AC

Project: Gannon Unit 3 WDF Modif.

Specific Conditions:

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5. (continued)

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 Operation Permit Application Revision

6. Within 60 days of final issuance of this construction modification permit, the permittee shall submit a Title V operation application to include the terms of this Unit 3 construction permit in the Title V permit for the F.J. Gannon Station.

[Rule 62-213.420, F.A.C.]

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

W. C. Thomas. P.E.
District Air Program Administrator
Southwest District

ATTACHMENT - GENERAL CONDITIONS

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida.Statutes (F.S.). The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. Not applicable to Air Permits.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;

GENERAL CONDITIONS:

- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to educe, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

GENERAL CONDITIONS:

- 13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Compliance with New Source Performance Standards (NSPS)
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
- 16. Not applicable to Air Permits.
- 17. Not applicable to Air Permits.