Barbara | Tile



## Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 January 19, 2000

David B. Struhs Secretary

Mr. Gregory M. Nelson, P.E. Designated Representative Acid Rain Program Tampa Electric Company P.O. Box 111 Tampa, FL 33601-0111

Re: Acid Rain Phase II NO x Compliance Plan Revisions

Big Bend and Gannon Stations; ORIS Codes: 0645 and 0646

Dear Mr. Nelson:

Thank you for your recent submission of the Acid Rain Phase II NO  $_{\tau}$  Compliance Plan Revisions for the subject facilities. We have reviewed the documents, and found them to be complete.

Sincerely,

Scott M. Sheplak, P.E.

Administrator Title V Section

cc: Jenny Jachim, EPA Region 4

### Florida Department of Environmental Protection

# Phase II NO<sub>X</sub> Compliance Plan For more information, see instructions and refer to 40 CFR 76.9

	lew X	Revised					Paç	je 1 of 2
STEP 1 Indicate plant name, state, and ORIS code from NADB, if applicable.	Plant Nam	e Tampa Electric C Big Bend Station	ompany			State FL	ORIS C 645	ode
STEP 2	"CB" for ce	ch affected Group 1 a ell burner, "CY" for cyc or wet bottom. Indicat	clone, "DBW" for d	ry bottom wall-fir	ed, "T" for ta	angentially		
	_ una vie	or not sollow. Maron	o the compliance	<u> </u>	01 00017 01111.			
		ID#	ID#	ID#	ID#	ID	#	ID#
		BB01	BB02	BB03	BB04			
		Туре	Туре	Туре	Type	19	pe	Туре
		WB	WB	WB	T			
(a) Standard annual average limitation of 0.50 lb/mmBtu ( bottom wall-fired boilers)		dry 🗌						
(b) Standard annual average limitation of 0.45 lb/mmBtu ( tangentially fired boilers)								
(c) EPA-approved early elect 40 CFR 76.8 through 12/31/0 above emission limit specific	7 (also indic							
(d) Standard annual average limitation of 0.46 lb/mmBtu ( bottom wall-fired boilers)		dry 🗌						
(e) Standard annual average limitation of 0.40 lb/mmBtu ( tangentially fired boilers)								
(f) Standard annual average limitation of 0.68 lb/mmBtu ( boilers)		ner 📗						
(g) Standard annual average limitation of 0.86 lb/mmBtu ( boilers)								
<ul> <li>(h) Standard annual average limitation of 0.80 lb/mmBtu ( fired boilers)</li> <li>(i) Standard annual average</li> </ul>	for vertically							
limitation of 0.84 lb/mmBtu (boilers)		om						
(j) NO <sub>x</sub> Averaging Plan (include form)	le NO <sub>x</sub> Avera	aging $old X$	X	X	X			
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission above for most stringent limit to any unit utilizing stack)								

DEP Form No. 62-210.900(1)(a)4. - Form Effective: 1/6/98

		Page 2 of 2
	Tampa Electric Company	
Plant Name (from Step 1)	Big Bend Station	

ID#

ID#

ID#

ID#

STEP 2, cont'd.

	BB01	BB02	BB03	BB04		
	Type WB	Type WB	Type WB	Type T	Туре	Туре
(I) Common stock mureus at to 40 CER						
(I) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging Form)	X	x				
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)						
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing						
(p) Repowering extension plan approved or under review						

ID#

#### STEP 3

Read the standard requirements and certification, enter the name of the designated representative, sign and date.

#### Standard Requirements

ID#

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Part of its Title V permit.

### Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

DEP Form No. 62-210.900(1)(a)4. - Form Effective: 1/6/98

STEP 3, cont'd.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Gregory M. Nelson	
Signature Glegory M. Wells	Date 12/20/49
, , , ,	

### Florida Department of Environmental Protection

### Phase II NO<sub>x</sub> Averaging Plan

For more information, see instructions for DEP Form No. 62-210.900(1)(a)4.and refer to 40 CFR 76.11

This submission is: X New

Revised

#### STEP 1

Identify the units participating in this averaging plan by plant name, state, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	_		(a)	(b)	(c)
	State	ID#	Emission Limitation	Alt. Contemp. Emission Limitation	Annual Heat Input Limit
F.J. Gannon Station	FL	GN03	0.86	0.89	8,500,000
F.J. Gannon Station	FL	GN04	0.86	0.82	7,500,000
F.J. Gannon Station	FL	GN05	0.84	0.76	10,000,000
F.J. Gannon Station	FL	GN06	0.84	1.10	27,000,000
Big Bend Station	FL	BB01	0.84	0.74	23,000,000
Big Bend Station	FL	BB02	0.84	0.74	24,000,000
Big Bend Station	FL	ввоз	0.84	0.53	10,000,000

### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

Btu-weighted annual average

0.77

<u><</u>

0.78

$$\frac{\sum_{i=1}^{n} (R_{Li} x HI_i)}{\sum_{i=1}^{n} HI_i}$$

<u><</u>

$$\frac{\sum_{i=1}^{n} \left[ R_{li} \times HI_{i} \right]}{\sum_{i=1}^{n} HI_{i}}$$

Where,

R<sub>Li</sub> = Alternative contemporaneous annual emmision limitation for unit i, in 16/mmBtu, as specified in column (b) of Step 1;

Applicable emission limitation for unit i, in lb/mmBtu, as specified in

column (a) of Step 1;

HI<sub>i</sub> = Annual heat input for unit i, in mmBtu, as specified in column (c) of

Step 1;

n = Number of units in the averaging plan

DEP Form No. 62-210.900(1)(a)5. - Form

Effective: 1/6/98

	Big Bend Station
	Plant Name (from Step 1)
STEP 3	This plan is effective for calendar year through calendar year unless notification to terminate the plan is given.
Mark one of the two options and enter dates.	<b>x</b> Treat this plan as <b>X</b> identical plans, each effective for one calendar year for the following calendar years: _2000_, 2001_, _2002, _2003 and _2004 unless notification to terminate one or more of these plans is given.
STEP 4	Special Provisions
Read the special provisions and certification, enter the name of the designated representative, and sign and date.	$\underline{\text{Emission Limitations}}$ $\underline{\text{Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO}_{x} \text{ under the plan only if the following requirements are met:}$
	(i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat

(b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or

(ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(Å) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.

(iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

#### Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

### **Termination**

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Gregory M. Nelson, P.E.	
Signatur	· Hegory M. Wille	Date 12/20/99
		/ /

input limit in the averaging plan,

DEP Form No. 62-210.900(1)(a)5. - Form

Effective: 1/6/98

Plant Name (from Step 1)

Big Bend Station

F.J. Gannon Station

STEP 1

Continue the identification of units from Step 1, page 1, here.

r	_		(a)	(b)	(c)
Plant Name	State	ID#	Emission Limitation	Alt. Contemp. Emission Limitation	Annual Heat Input Limit
Big Bend Station	FL	BB04	0.45	0.44	20,000,000
	_				
	_				
	_				
	_				
	_				
					_

DEP Form No. 62-210.900(1)(a)5. - Form Effective: 1/6/98

Source (Plant) Name:		Date Compliance Plan	Received:
TOO JAMPA ETERIC BIC BEND + GANNON J	<b></b>	12-22-99	
BIC BERN + GANNON &	TAFLONS		
· Co	ompleteness Review	11	П
Reviewer:		Complete	Date:
JOH CASCIO		Incomplete	1.13.00
S	ubstantive Review		u .
Reviewer:		Recommended for	Date:
		Approval?	. ^
JOH CASCIO		∏Yes ∏No	1-19-00
Completeness Review			
Checklist Items:		Notes/Comments/Issu	ues:
All pertinent spaces are filled in,	Ty Yes No		
information is legible, appropriate, (e.g.	Tres [] No		
ORIS code is entered in "ORIS Code" box) and compliance plan is signed and		•	
dated.			
		÷	
Substantive Review			
Checklist Items:		Notes/Comments/Issu	ues:
STEP 1:			
Plant Name, State, and ORIS Code	Yes No		
information matches affected source			
information in Section 4 of the Acid Rain Permit Writer's Guide or "STEP 1" of the			
most recent Certificate of Representation			
(DR form) submitted for affected source.		-	

Source (Plant) Name:		Date Compliance Plan Received:
	•	
Checklist Items:		Notes/Comments/Issues:
STEP 2:		
(i) For each boiler that has an EPA-approved early election plan in effect, the box in row "(c)" has been marked, and the box in either row (a) or (b) has been marked. If the boiler is a dry bottom wall-fired boiler, the box in row (a) should be marked. If the boiler is tangentially-fired, the box in row (b) should be marked. The permitting authority has verified the boiler Phase and type, and that the boiler has been flagged "EE" to indicate that EPA has approved an early election plan for the boiler (see Section 4). Note: Only Phase II Group 1 boilers with EPA-approved early election plans can choose this	☐ Yes ☐ No ☐/N/A	
(ii) For each boiler that does <u>not</u> have an EPA-approved early election plan in effect and is <u>not</u> averaging with other boilers, <u>one</u> of the standard limit boxes (at row (a), (b), and (d) through (i)) has been chosen that appropriately corresponds with the boiler type indicated in Section 4 for that boiler.  (iii) Each boiler which <u>is</u> averaging with other boilers has marked the box in row (j) and is included in a Phase II NOx averaging plan submitted with the Phase II NOx Compliance Plan.	☐ Yes ☐ No ☐/NA  Yes ☐ No ☐ NA	

Source (Plant) Name:		Date Compliance Plan Received:
Checklist Items:		Notes/Comments/Issues:
(iv) A boiler for which the box in row (k) has been marked must also have marked the box representing the lowest of the standard limits (at rows (a), (b), and (d) through (i)) applicable to the boilers using the common stack. The permitting authority has verified that every boiler identified at row (k) is emitting at a common stack (by reviewing the monitoring plan for the affected source) and that every boiler identified at row (k) has a NOx emissions limitation under title IV (see Section 4). <sup>2</sup>	☐ Yes ☐ No	

<sup>&</sup>lt;sup>1</sup> For instance, if 2 boilers share a common stack, one with a 0.45 lb/mmBtu NOx limit, and the other with a 0.50 lb/mmBtu NOx limit, row (b) denoting a 0.45 lb/mmBtu NOx limit would be checked for both boilers (in addition to row (k)), since that is the lowest NOx limit for all of the boilers emitting at that stack. The 0.45 lb/mmBtu limit would also be incorporated into the Phase II permit unit pages for each boiler. This, and early election, are the only cases in which a boiler of a certain type and Phase can choose a standard limit different fr the standard limit established for that type and Phase of boiler. However, the chosen limit will always be equal or less than the limit established for that type and Phase of boiler.

<sup>&</sup>lt;sup>2</sup> Contact your U.S. EPA Regional or Headquarters Acid Rain Program CEM contacts if you require assistan reviewing a monitoring plan for an affected source.

Source (Plant) Name:		Date Compliance Plan Received:
Checklist Items:		Notes/Comments/Issues:
(v) A boiler for which the box in row (l) has been marked also has the box in row (j) marked, and that boiler is included in	Yes No	
a Phase II NOx averaging plan submitted with the Phase II NOx compliance plan.  The permitting authority has verified that	□ N/A	
every boiler identified at row (l) is emitting at a common stack (by		
reviewing the monitoring plan for the affected source) and that every boiler identified at row (l) has a NOx emissions limitation under title IV (see Section 4).	en de la companya de	
(vi) For every boiler for which row (m)	☐ Yes ☐ No	
has been marked, the permitting authority has confirmed with EPA Headquarters, Acid Rain Division, Source Assessment	^NA	
Branch ((202) 564-9180) that an apportionment method under 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2) has been approved.		
(vii) For every boiler for which row (n) has been marked, the appropriate Phase II	☐ Yes ☐ No	
AEL form has been attached and includes that boiler.	ŇΑ	

Source (Plant) Name:		Date Compliance Plan Received:
Checklist Items:  (ix) For every boiler for which row (o) has been marked, the permitting authority has confirmed with EPA Headquarters, Acid Rain Division, Source Assessment Branch ((202) 564-9180) that an AEL demonstration period or final AEL is currently under review for that boiler or that the boiler has an ongoing AEL demonstration period.	□ Yes □ No □ M/A	Notes/Comments/Issues:
(x) For every boiler for which row (p) has been marked, a repowering extension plan has been approved for that boiler. If the approved repowering extension plan will expire before the expiration of the Phase II acid rain permit, an additional follow-on Phase II NOx compliance option has been marked for that boiler as well.	☐ Yes ☐ No	
STEP 3:  The designated representative (DR) or alternate designated representative (ADR) entered at this Step has been verified as the certified DR or ADR as of the date the Phase II NOx compliance plan was signed.	Yes No	
Note: The valid DR for a submission can DR form for an affected source, through D contacting either the EPA Regional acid ra	R information avails	able on the World Wide Web, or by

Phase II NOx Averaging Plan Checklist (40 CFR 76.11) Source (Plant) Name: Too FAMPA ELECTRIC Date Compliance Plan Received: 12-22-99 BIG KERN + GANDON STATIONS Completeness Review Complete Reviewer: Date: TOY CASCIO 1-13-00 ☐ Incomplete Substantive Review Recommended for Reviewer: Date: TOM CASCIO Approval? 1-19-00 Ty Yes □No Completeness Review Notes/Comments/Issues: **Checklist Items:** Yes No All pertinent spaces are filled in, information is legible, appropriate, (e.g. ORIS code is entered in "ORIS Code" box) and compliance plan is signed and dated.

Source (Plant) Name: BIC BLWN + CANNON	,	Date Compliance Plan Received:
Substantive Review		
Checklist Items:		Notes/Comments/Issues:
STEP 1:		
(i) The plant name and State identified in the Phase II NOx Compliance Plan for the affected source are also identified in the Phase II NOx averaging plan.	Yes No	
(ii) The boilers ID #'s for which row "j" has been checked in the Phase II NOx Compliance Plan for the affected source match the boiler ID #'s identified for the affected source in the averaging plan.	√Yes □ No	
(iii) The standard emission limitation entered at column "a" for each boiler at the affected source matches the standard emission limitation for that type of boiler in 40 CFR 76.5, 76.6, or 76.7 (early election units must enter the applicable emission limitation from 40 CFR 76.7) and with the standard limitation denoted for the boiler in Section 4 of the Acid Rain Permit Writer's Guide (including those units that are early election units or units that have, or are applying for, an alternative emission limitation).	Yes No	

Source (Plant) Name:	Date Compliance Plan Received:					
Checklist Items:	Notes/Comments/Issues:					
STEP 1, cont'd.						
(iv) An alternative contemporaneous emissions limitation (ACEL) has been entered for each boiler in column "b," and that limitation has been rounded to the nearest hundredth (for example, 0.48 lb/mmBtu). For units that have also marked line "l" of the Phase II NOx Compliance plan, the same ACEL has been entered in column "b" of the averaging plan for each unit utilizing the same common stack.						
(v) A heat input limit has been entered Yes N for every unit listed at STEP 1.						
STEP 2:						
Confirm that the numbers entered in the left and right boxe properly.	es at STEP 2 have been calculated					
For the <b>left box</b> , calculate what the group NOx emission ra accordance with the ACELs entered at column "b" by:	ate for the units would be if operated in					
(1) For each unit, multiplying the emission limitation in cocolumn "c," and adding the resulting numbers.	lumn "b" times the annual heat input in					
(2) Adding all of the annual heat input figures in column "	c."					
(3) Divide the answer from number (1) above by the answer from number (2) above. The result should equal the figure entered in the <b>left box</b> at STEP 2.						

Source (Plant) Name:	Date Compliance Plan Received:						
STEP 2, cont'd.							
Checklist Items:	Notes/Comments/Issues:						
(i) Does the reviewer's calculation of the Yes No							
number in the <b>left box</b> at STEP 2 equal the number calculated and entered in the	· ·						
left box by the Designated Representative?	·						
representative.							
For the <b>right box</b> , calculate what the group NOx emission rate accordance with the emission limitations entered at column "a							
(1) For each unit, multiplying the emission limitation in column "a" times the annual heat input in column "c," and adding the resulting numbers.							
(2) Adding all of the annual heat input figures in column "c."							
(3) Divide the answer from number (1) above by the answer from number (2) above. The result should equal the figure entered in the <b>right box</b> at STEP 2.							
(ii) Does the reviewer's calculation of the Yes No							
number in the <b>right box</b> at STEP 2 equal the number calculated and entered in the							
right box at STEP 2 by the Designated	· .						
Representative?							
`							
(iii) The number in the left box must be Yes No	· ·						
less than or equal to the number in the right box. Is the number in the <b>left box</b>							
at STEP 2 less than or equal to the							
number in the right box at STEP 2?							

Source (Plant) Name:	Date Compliance Plan Received:
Checklist Items:	Notes/Comments/Issues:
STEP 3:	
If one averaging plan is to be effective for more than one calendar year, a plan duration of not greater than 5 calendars years has been entered.	· · · · · · · · · · · · · · · · · · ·
If the averaging plan is to be treated as a number of identical plans effective for one year each, the number of identical plans entered matches the number of years entered for which the plans will be in effect.	
STEP 4:	
The designated representative (DR) or alternate designated representative (ADR) entered at this Step has been verified as the certified DR or ADR as of the date the Phase II NOx averaging plan was signed.	
Note: The valid DR for a submission can be identified by reviappropriate DR form for an affected source, through DR information web, or by contacting either the EPA Regional acid rain contaction Headquarters.	nation available on the World Wide



BUREAU OF AIR REGULATION

December 20, 1999

Mr. Robert Miller U.S. Environmental Protection Agency Acid Rain Program (6204J) 501 3<sup>rd</sup> Street Washington, DC 20001 Via FedEx Airbill No. 7925 2848 2980

Airbill No. 7903 2011 0251

Via FedEx

Mr. Scott M. Sheplak, P.E. Florida Department of Environmental Protection Division of Air Resource Management 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301

Re: Tampa Electric Company – Phase II NO<sub>x</sub> Compliance Plan Revision for Big Bend and Gannon Stations

Dear Mr. Miller and Mr. Sheplak:

Please find enclosed the revised Phase II NO<sub>x</sub> Compliance Plan for Tampa Electric Company. This revised plan incorporates a NO<sub>x</sub> Averaging Strategy for the following units:

Big Bend Station	Gannon Station
BB01	GN03
BB02	GN04
BB03	GN05
BB04	GN06

This plan revises the original compliance plan submitted on December 23, 1997 as per 40 CFR 76.11. If you have any questions, please do not hesitate to contact me at (813) 641-5016.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements

Mr. Robert Miller Mr. Scott M. Sheplak, P.E. December 20, 1999 Page 2 of 2

and information or omitting required statements and information, including the possibility of fine or imprisonment.

Sincerely,

Gregory M. Nelson, P.E. Designated Representative

Acid Rain Program

EP\gm\SKT131

**Enclosures** 

c: Brian Beals, USEPA Scott Davis, USEPA Region IV Jerry Campbell, EPCHC



### RECEIVED

DEC 29 1997

BUREAU OF AIR REGULATION

December 23, 1997

Mr. Scott M. Sheplak, P.E. Florida Department of Environmental Protection Division of Air Resources Management 2600 Blair Stone Road (MS 5500) Tallahassee, Florida 32399-2400 Certified Mail No. P 240 442 406 Return Receipt Requested

Re: Florida Acid Rain Program

Phase II NOx Compliance Plans for Tampa Electric Company (TEC) Big Bend and F.J. Gannon Stations

Dear Mr. Sheplak:

Enclosed with this letter is one complete set of the Phase II NOx Compliance Plan for the following TEC units:

Big Bend Station Boiler ID#s: BB01

BB02

**BB03** 

**BB04** 

F.J. Gannon Station Boiler ID#s:

**GB03** 

GB04 GB05

GB06

GBoo

These forms are being submitted per the requirements of the Acid Rain Program (40 CFR 76.9 and Rule 62-210.900, F.A.C.). In accordance with 40 CFR 76.11, TEC reserves the right to amend this NOx Compliance Plan by submitting a NOx Averaging Plan "at any time up to and including . . . July 1 . . . of the calendar year for which the averaging plan is to become effective."

TAMPA ELECTRIC COMPANY

P.O. BOX 111

TAMPA, FL 33601-0111

HILLSBOROUGH COUNTY 223-0800

OUTSIDE OF HILLSBOROUGH COUNTY 1-888-223-0800

HTTP://WWW.TECOENERGY.COM

AN EQUAL OPPORTUNITY COMPANY

Mr. Scott M. Sheplak, P.E. December 23, 1997 Page 2 of 2

Please note that pursuant to 40 CFR 76.6, a Phase II NOx Compliance Plan is not included for F.J. Gannon Station Boilers GB01 and GB02, which are exempted cyclone units with a Maximum Continuous steam Flow at 100% of Load of less than 1060, in thousands of lb/hr; nor for Polk Power Station Boiler \*\*1, which commenced operation on April 20, 1996, and is not a defined boiler type for which a NOx emission limitation has been promulgated.

Should you have any questions or concerns regarding this matter, please contact Theresa Watley or me at 813/641-5034.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Sincerely,

Patrick A. Ho, P.E. Designated Representative Acid Rain Program

EP/gm/TJLW581

Enclosure

c: Brian Beals, USEPA Scott Davis, USEPA Region IV Iwan Choronenko, EPCHC

### Horida Department of Environmental Protection

# Phase II NO<sub>X</sub> Compliance Plan For more information, see instructions and refer to 40 CFR 76.9

	evised				Page	1 of 2
muicate plant name, state,	ectric Con non Statio			F. Stat		e
type: "CB" for o	ell burner, "CY"	for cyclone, "D	ler using the boile BW" for dry botto ate the complianc	m wall-fired, "	T" for tangentially	
	ID#	ID#	ID#	ID#	ID#	ID#
	GN03	GN04	GN05	GN06	- Type	Type
	СҮ	Type CY	Type WB	WB	уре	Туре
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)						
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for <u>Phase II</u> dry bottom wall-fired boilers)						
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	X	X				
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)			X	X		
(j) $NO_x$ Averaging Plan (include $NO_x$ Averaging form)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						

DEP Form No. 62-210.900(1)(a)4. - Form Effective \_\_\_\_\_

	Tampa	Electi	cic	Company
Plant Name (from Step 1	F.J.	Gannon	Sta	tion

Page 2 of 2

STEP 2, cont'd.

	GN03	GN04	ID# GN05	ID# GN06	ID#	ID#
•	Туре СҮ	Type CY	Type WB	Type WB	Туре	Туре
	,					
(I) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging Form)						
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)						
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing						
(p) Repowering extension plan approved or under review						
• STEP 3	Standard Regu	irements				

Read the standard requirements and certification, enter the name of the designated representative, sign and date.

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Part of its Title V permit.

#### Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO, as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO, for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

DEP Form No. 62-210.900(1)(a)4. - Form Effective \_

Page 3.

STEP 3, cont'd.

### Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Patrick A.	Но				,
Signature	Pott A. Ho	Date	12	/23	/97
	<u> </u>		$\overline{}$	$\overline{}$	

### RECEIVED

DEG 23 1995

BUREAU OF AIR REGULATION

STEP 1 Identify the source by plant name, State, and ORIS code from NADB

STEP 2
Enter the boiler ID#
from NADB for each
affected unit, and
indicate whether a
repowering plan is
being submitted for
the unit by entering
"yes" or "no" at
column c. For new
units, enter the requested information
in columns d and e

STEP 3 Check the box if the response in column c of Step 2 is "Yes" for any unit

### **Phase II Permit Application**

Compliance Plan Page 1

For more information	n, see instruction	s and refer to 40	CFR 72.30 an	d 72.31 and	Chapter 62-214, F.A.C.
This submission is:	X Now	Revised			

F.J. Gannon FL 646
Plant Name State ORIS Code

d Boiler ID# Unit Will Repowering **New Units** New Units Hold Allow-Plan ances in Accordance with 40 CFR Commence 72.9(c)(1) Monitor Operation Date Certification Deadline Yes GB01 No GB02 No Yes GB03 No Yes GB04 No Yes GB05 No Yes GB06 No Yes Yes Yes Yes Yes Yes Yes

For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

DEP Form No. 62-210.900(1)(a) - Form Effective: 7-1-95

Plant Name (from Step 1)

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

#### Standard Requirements

#### Permit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shell:
  (i) Submit a complete Acid Rain part application (including a compliance plen) under 40 CFR part 72,
  Rules 62-214.320 and 330, F.A.C. in accordance with the deadlines specified in Rule 62-214.320,
  F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each Acid Rein source and each Acid Rein unit at the source shall:

  (i) Operate the unit in compliance with a complete Acid Rein part application or a superseding Acid Rein part issued by the permitting authority; and

(ii) Have an Acid Rain Part.

### Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

#### Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or

- (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowence shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowence allocated by the Administrator under the Acid Rein Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rein Program. No provision of the Acid Rein Program, the Acid Rein permit application, the Acid Rein permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  (i) Pay without gemand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

(ii) All emissions monitoring information, in accordance with 40 CFR part 75;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

#### Recordkeeping and Reporting Requirements (cont.)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart 1 and 40 CFR part 75.

#### Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shell be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
  (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- of which they are not owners or operators or the designated representative.
  (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title Lof the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

#### Certification

I am authorized to make this submission on benalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I here personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information. I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Hugh W. Smith		
Signature Hugh W. Smith	Date	12/19/95

Effective: 7-1-95

STEP 5 (optional)

\* Enter the source AIRS
and FINDS-identification
numbers, if known

AIRS 0570040

### F. J. Gannon Power Plant

Facility ID No.: 0570040

### Section IV. This section is the Acid Rain Part.

Acid Rain Part, Phase II

Operated by: Tampa Electric Company

ORIS code:

646

Effective:

The emissions units listed below are regulated under Acid Rain Part, Phase II.

### E.U.

ID No.	<b>Description</b>				
01	Boiler				
02	Boiler				
03	Boiler				
04	Boiler				
05	Boiler				
06	Boiler				

- 1. The Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
  - a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO2) allowance allocations and nitrogen oxide (NOx) requirements for each Acid Rain unit:

	Year	2000	2001	2002	2003
ID No. 01 GB01	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	3812*	3812*		
	NOx limit	**	**		
ID No. 02 GB02	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	4387*	4387*		
	NOx limit	**	**		

ID No. 03 GB03	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	5615*	5615*	
	NOx limit	**	**	
ID No. 04 GB04	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	6171*	6171*	
	NOx limit	**	**	
ID No. 05 GB05	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	6482*	6482*	
	NOx limit	**	**	
ID No. 06 GB06	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	9996*	9996*	
	NOx limit	**	**	

<sup>\*</sup>The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2, 3, or 4 of 40 CFR 73.

3. Comments, notes, and justifications: None.

### Section V. Attachments and relevant documents.

Acid Rain Application/Compliance Plan received 12/26/95.

<sup>\*\*</sup>By January 1, 1999, this Part will be reopened to add NOx requirements in accordance with the regulations implementing section 407 of the Clean Air Act.