

One Energy Place  
Pensacola, Florida 32520

850.444.6111

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AUG 24 1999

BUREAU OF AIR REGULATION



August 23, 1999

Mr. Scott M. Sheplak, P.E.  
Department of Environmental Protection  
Division of Air Resources Management  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:


RE: Plant Lansing Smith Title IV Phase II NOx Compliance Plan  
Southern System NOx Averaging Plan Revision  
ORIS Code: 643  
FDEP Draft Permit No: 005014-001-AV

Attached, please find a copy of Gulf Power's revised Phase II NOx Averaging Plan for the Lansing Smith Electric Generating Plant (ORIS Code 643). Please note that the new original signed copy of the averaging plan is attached to revised Gulf Power Title IV NOx Averaging Plan dated August 23, 1999. ***This revised submission changes the Southern Company System NOx Averaging Plan to include four units at Plant Arkwright at Georgia Power. Additionally, these forms are being resubmitted on FDEP forms as requested in our meeting on August 6, 1999.***

The NOx compliance plan for this unit utilizes a NOx averaging plan that includes other affected units in the Southern Company. Title V permitting authorities with jurisdiction over the units in the plan include the States of Alabama, Georgia and Mississippi, as well as the Jefferson County Department of Health in Alabama. Our sister operating companies within the Southern Company have provided their respective state environmental regulatory agencies a copy of this NOx averaging plan with their Phase II NOx permit compliance plans, thereby fulfilling the requirement of the General Instructions (Item 4a) to provide a copy of the plan to other Title V permitting authorities with jurisdiction over any units in the plan.

If you have any questions or need further information regarding the Lansing Smith Title IV Phase II Compliance and Averaging Plan, please call me at (850) 444.6527.

Sincerely,

  
G. Dwain Waters, Q.E.P.  
Air Quality Programs Coordinator

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Mr. Scott M. Sheplack

August 23, 1999

cc: Robert G. Moore, Gulf Power Company  
James O Vick, Gulf Power Company  
Kimberly D. Flowers, Gulf Power Company  
Stan H. Houston, Gulf Power Company  
Danny Herrin, Southern Company Services  
R. Doug Neeley, EPA Region IV

# 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

This submission is:  New  Revised

Page  of

<b>STEP 1</b> Indicate plant name, state, and ORIS code from NADB, if applicable.	Lansing Smith Electric Generating Plant Plant Name	FL State	643 ORIS Code
<b>STEP 2</b>	Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.		

ID#	ID#	ID#	ID#	ID#	ID#
1	2				
Type	Type	Type	Type	Type	Type
T	T				

- |   |                                     |                                     |                          |                          |                          |                          |
|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| (a) Standard annual average emission limitation of 0.50 lb/mmBtu (for <u>Phase I</u> dry bottom wall-fired boilers)   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Standard annual average emission limitation of 0.45 lb/mmBtu (for <u>Phase I</u> tangentially fired boilers)  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Standard annual average emission limitation of 0.46 lb/mmBtu (for <u>Phase II</u> dry bottom wall-fired boilers)  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (e) Standard annual average emission limitation of 0.40 lb/mmBtu (for <u>Phase II</u> tangentially fired boilers)   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (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) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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	JAMES O. VICK	
Signature		Date 12/18/97

LANSING SMITH ELECTRIC GENERATING PLANT  
Plant Name (from Step 1)

**STEP 2, cont'd.**

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(l) 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)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(p) Repowering extension plan approved or under review

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**STEP 3**

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

**Standard Requirements**

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.

# 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:  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	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
See Page 3.					

**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

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.46

0.46

≤

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

≤

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

W here,

- R<sub>U</sub> = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R<sub>ij</sub> = 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

Southern Company Averaging Plan Participating Plants

Plant Name (from Step 1)

STEP 3

Mark one of the two options and enter dates.

This plan is effective for calendar year \_\_\_\_\_ through calendar year \_\_\_\_\_ unless notification to terminate the plan is given.

Treat this plan as  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

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

Special Provisions

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO<sub>x</sub> 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 input limit in the averaging plan,
  - (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)(A) 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

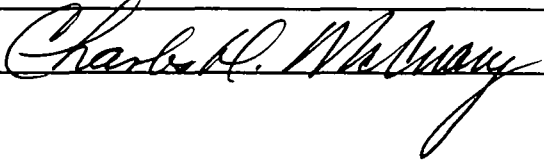
The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

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 Charles D. McCrary	
Signature 	Date 8/17/99

## Southern Company Averaging Plan Participating Plants

Plant Name (from Step 1)

## STEP 1

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

Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
Arkwright	GA	1	0.45	0.70	1,875,509
Arkwright	GA	2	0.45	0.70	1,886,089
Arkwright	GA	3	0.50	0.70	2,006,321
Arkwright	GA	4	0.50	0.70	1,932,669
Barry	AL	1	0.40	0.49	10,805,761
Barry	AL	2	0.40	0.49	10,643,159
Barry	AL	3	0.40	0.49	17,148,763
Barry	AL	4	0.40	0.37	25,471,720
Barry	AL	5	0.40	0.45	50,897,853
Bowen	GA	1	0.45	0.42	45,395,755
Bowen	GA	2	0.45	0.43	46,911,826
Bowen	GA	3	0.45	0.43	59,796,338
Bowen	GA	4	0.45	0.43	62,106,898
Branch	GA	1	0.68	0.99	14,906,580
Branch	GA	2	0.50	0.72	16,571,123
Branch	GA	3	0.68	0.84	27,015,768
Branch	GA	4	0.68	0.84	28,967,878
Crist	FL	4	0.45	0.52	3,062,929
Crist	FL	5	0.45	0.60	4,850,348
Crist	FL	6	0.50	0.45	17,603,755
Crist	FL	7	0.50	0.45	32,267,381
Daniel	MS	1	0.45	0.28	28,010,957
Daniel	MS	2	0.45	0.26	29,025,313
Gadsden	AL	1	0.45	0.65	2,473,380
Gadsden	AL	2	0.45	0.68	2,333,659
Gaston	AL	1	0.50	0.43	15,666,430
Gaston	AL	2	0.50	0.43	15,642,121
Gaston	AL	3	0.50	0.43	16,016,613
Gaston	AL	4	0.50	0.43	15,780,983
Gaston	AL	5	0.45	0.42	43,137,116
Gorgas	AL	6	0.46	0.86	5,058,595
Gorgas	AL	7	0.46	0.86	5,052,447
Gorgas	AL	8	0.40	0.49	11,173,785
Gorgas	AL	9	0.40	0.30	10,939,664
Gorgas	AL	10	0.40	0.76	46,251,622



## Southern Company Averaging Plan Participating Plants

Plant Name (from Step 1)

## STEP 1

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

Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
Greene Co	AL	1	0.68	0.98	19,524,675
Greene Co	AL	2	0.46	0.43	18,839,670
Hammond	GA	1	0.50	0.83	4,539,663
Hammond	GA	2	0.50	0.83	6,333,156
Hammond	GA	3	0.50	0.83	6,439,818
Hammond	GA	4	0.50	0.45	26,126,591
Kraft	GA	1	0.45	0.58	2,974,849
Kraft	GA	2	0.45	0.58	2,238,703
Kraft	GA	3	0.45	0.58	3,971,009
L. Smith	FL	1	0.40	0.62	9,199,644
L. Smith	FL	2	0.40	0.44	10,154,723
McDonough	GA	1	0.45	0.42	18,934,013
McDonough	GA	2	0.45	0.42	17,338,565
McIntosh	GA	1	0.50	0.86	8,568,975
Miller	AL	1	0.46	0.29	53,814,591
Miller	AL	2	0.46	0.29	52,772,559
Miller	AL	3	0.46	0.29	49,093,163
Miller	AL	4	0.46	0.29	55,722,252
Mitchell	GA	3	0.45	0.62	5,322,072
Scherer	GA	1	0.40	0.50	52,573,864
Scherer	GA	2	0.40	0.50	55,563,600
Scherer	GA	3	0.45	0.29	37,912,770
Scherer	GA	4	0.40	0.30	70,093,731
Scholz	FL	1	0.50	0.68	1,855,434
Scholz	FL	2	0.50	0.77	1,864,795
Wansley	GA	1	0.45	0.41	53,141,279
Wansley	GA	2	0.45	0.42	49,741,786
Watson	MS	4	0.50	0.50	17,100,575
Watson	MS	5	0.50	0.65	33,455,317
Yates	GA	1	0.45	0.48	3,853,527
Yates	GA	2	0.45	0.48	4,687,321
Yates	GA	3	0.45	0.48	3,981,916
Yates	GA	4	0.45	0.40	7,087,706
Yates	GA	5	0.45	0.40	5,186,897
Yates	GA	6	0.45	0.33	13,373,298
Yates	GA	7	0.45	0.30	14,601,869