

CERTIFIED MAIL

EV 990901

September 13, 2000

Mr. E. Frey
Florida Dept. Of Environmental Protection
7825 Baymeadows Way, Suite 200B
Jacksonville, Fl 32256-7577

RECEIVED

SEP 16 2000

BUREAU OF AIR REGULATION



RE: JEA/St. Johns River Power Park (SJRPP) Units #1 & 2
COC Permit No. PA-81-13
Title V Permit No. 0310045-002-AV
Notification of Annual Performance Test, Relative Accuracy Test Audit (RATA),
and Annual Coal/Petroleum Coke Performance Test

Dear Mr. Frey,

The annual performance test for the above referenced facility is required to be conducted as specified in the Conditions of Certification, I.A.5., I.B.3., I.C.2-5, and Title V, D.20., D.38., D.39., D.42., D.44., D.45., D.46., D.47., D.48., D.49., D.59., D.51., D.52., and D.62.

The annual coal/petroleum coke performance test for the above referenced facility is required to be conducted as specified in the Conditions of Certification, I.A.g. and h., I.B.3., I.C.2-5., and Title V, D.20., D.38., D.39., D.44., D.45., D.46., D.47., D.48., D.49., D.52., D.62., and D.68.

The testing is tentatively scheduled to commence October 17, 2000, in conjunction with the RATA of the Continuous Emission Monitoring System (CEMS). In the event there is a change in the testing schedule, your office shall be notified.

Please contact me at (904) 665-8797 if you have any questions.

Sincerely,

Mark K. Loechelt
Environmental. Production Assurance Leader

xc: H. Oven, FDEP
B. Mitchell, FDEP
M. Harley, FDEP
W. Tutt, RESD
W. Smith, EPA

CERTIFIED MAIL

EV 001117

November 17, 2000



Mr. E. Frey
Florida Dept. Of Environmental Protection
7825 Baymeadows Way, Suite 200B
Jacksonville, Fl 32256-7577

RECEIVED

NOV 27 2000

BUREAU OF AIR REGULATION

RE: JEA/St. Johns River Power Park (SJRPP) Unit #1
ORISPL 000207-U02, Component No. 250201
COC Permit No. PA-81-13
Title V Permit No. 0310045-002-AV
Notification of Flow Monitor Recertification Testing

Dear Mr. Frey,

Pursuant to 40 CFR Part 75.61(a)(1)(ii), please be advised that recertification testing of the above referenced monitor shall take place no earlier than the week of December 5, 2000. Recent flow RATA tests indicate a significant system bias exists, so a new linearity curve shall be established and confirmed to ensure accurate on-line monitor indications.

In the event there is a change in the testing schedule, your office shall be notified. Please contact me at (904) 665-8797 if you have any questions.

Sincerely,

Mark K. Loechelt
Environmental. Production Assurance Leader

xc: H. Oven, FDEP
B. Mitchell, FDEP
M. Harley, FDEP
W. Tutt, RESD
W. Smith, EPA



DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Marjory Stoneman Douglas Building
 3900 Commonwealth Boulevard
 Tallahassee, Florida 32399-3000

Fax Number ~~(904)~~ 921-3000
 (850)

F A X C O V E R S H E E T

DATE: 10-13-98

TO: Bruce Mitchell

PHONE: 8-1344
 FAX: 922-6979

FROM: DEFF Brown

PHONE: 9-9625

REGARDING: _____

[] This document will be mailed after faxing This document will not be mailed after faxing

Number of pages including cover sheet: 3

Message _____

(Handwritten scribbles)



Florida
Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia Wetherell
Secretary

F A X T R A N S M I T T A L S H E E T

DATE: 10-12-98

TO: Robert Manning

PHONE: 222-7500

FAX: 224-8551

FROM: Bruce Mitchell

PHONE: 921-9500

Division of Air Resources Management

FAX: 850.922.6979

RE: FEA T-V permit

CC: _____

Total number of pages including cover sheet: _____

Message

Here are the pages that changed with a new effective
date of 1-1-99.

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve, and Manage Florida's Environmental and Natural Resources"

Printed on recycled paper

IN THE DISTRICT COURT OF APPEAL
FIRST DISTRICT, STATE OF FLORIDA

JACKSONVILLE ELECTRIC AUTHORITY

Appellant,

v.

1ST DCA Case No. 98-00441
OGC Case No. 98-0196

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION,

Appellee.

**SETTLEMENT STIPULATION AND
MOTION TO RELINQUISH JURISDICTION**

Appellant Jacksonville Electric Authority ("JEA") and Appellee State of Florida Department of Environmental Protection ("DEP") stipulate to a settlement of this case and, pursuant to Fla. R. App. P. 9.300 and 9.350(a), move the court for an Order relinquishing jurisdiction in this matter to allow actions to be taken in furtherance of the settlement.

Wherefore, JEA and DEP state:

1. This proceeding stemmed from DEP's issuance of Title V Permit No. 0310045-001-AV to JEA, pursuant to Chapter 403, Florida Statutes, and Chapter 62-213, Florida Administrative Code.

2. JEA and DEP have agreed that specific revisions of Title V Permit No. 0310045-001-AV will resolve all issues involved in this appeal. The revisions agreed to are reflected in the attached Final Permit Determination (stamped DRAFT), received by JEA's counsel on October 6, 1998. (Attachment A).

3. The Final Permit Determination, once issued, will supersede Final Title V Permit No. 0310045-001-AV, the effectiveness of which was stayed upon the filing of this appeal pursuant to Fla. R. App. P. 9.310(b)(2).

4. JEA and DEP agree that DEP will issue the Final Permit Determination, as reflected in Attachment A, as soon as possible after the filing of this Stipulation, with the following additional revisions: (1) the Effective Date will be changed to January 1, 1999, the Renewal Application Due Date will be changed to July 5, 2003, and the Expiration Date will be changed to December 31, 2003, and (2) the emissions unit/activities listed in Attachment B will replace Appendix I-1 in the Final Permit Determination.

5. Each party shall bear its own costs and attorney fees in this proceeding.

THEREFORE, the disputed issues having been resolved, JEA and DEP move the court for an Order relinquishing jurisdiction in this case so that the actions described above can be taken in furtherance of the settlement.

Dated this 13 day of October, 1998.

HOPPING GREEN SAMS & SMITH, P.A.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

By: Robert A. Manning
James S. Alves

By: _____
Jeffrey Brown

Florida Bar No. 443750
Robert A. Manning
Florida Bar No. 0035173
Post Office Box 6526
Tallahassee, FL 32314
(850) 222-7500

Assistant General Counsel
3900 Commonwealth Blvd.
Mail Station 35
Tallahassee, FL 32399-300
(850) 488-9314

ATTORNEYS FOR JACKSONVILLE
ELECTRIC AUTHORITY

E.10. Particulate Matter. In accordance with Chapter 62-297, F.A.C., EPA Method 5 shall be used to determine compliance with the particulate matter emission limitations established in Revised Table 6, PSD-FL-010, for emissions units 4 thru 17 that exhaust through a stack. If the opacity limits are not met for those emissions units that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests. See specific condition E.9.

[Rules 62-4.070 and 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; and, PSD-FL-010]

E.11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

{Permitting note: The Revised Table 2 includes a summary of the various emissions points/activities and their control systems for the Coal Storage Yard and Transfer Systems. The throughput rate amounts displayed represent approximately 74 percent of their maximum potential. Therefore, when any visible emissions test is being conducted, the emissions point/activity being evaluated should be operating at or near its maximum potential throughput rate.}

[Rules 62-297.310(2) & (2)(b), 62-213.440(1) and 62-4.070(3), F.A.C.; Part XI, Rule 2.1101, JEPB]

E.12. Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.; Part XI, Rule 2.1101, JEPB]

10-1-98

Bert,

As stated earlier, E.2. & E.3. are being deleted and the subsequent conditions renumbered. Please look at the "permitting note" drafted for E.11. (was E.13). Give me a call when you get a chance.

Thanks, Bruce

Table 2. Fugitive Emissions and Control Summary (Revised: from PSD Permit: PSD-FL-010)

Process	Type	Amount	Factor	Control	Technique	Emissions (Grams/sec)
1. Ship Unloading	2 Grab Buckets	2,200 Tons/hr	0.0016 lb/Ton ⁺	70.0%	Suppression, Enclosure	0.13 ⁺
2. Feeders to Conveyor A.	2 Points	2,200 Tons/hr	0.00039 lb/Ton	85.0%	Suppression, Enclosure	4.02
3. Conveyor Transfers 1 and 2.	2 Points	2,200 Tons/hr	0.00087 lb/Ton**	85.0%	Suppression, Enclosure	0.07
4. Conveyor Transfers 3, 4, 5 and D to D by-pass.	4 Points	2,200 Tons/hr	0.00118 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.33
5. Conveyor Transfers 6 and 7.	2 Points	2,000 Tons/hr	0.00106 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.13
6. Traveling Stackers	3 Points: 1 Point	2,200 Tons/hr	0.00031 lb/Ton	75.0%	Enclosure, Conditioned Material	0.02
	1 Point	2,200 Tons/hr	0.00039 lb/Ton	75.0%	Enclosure, Conditioned Material	0.03
	1 Point	2,200 Tons/hr	0.00017 lb/Ton	0.0%		0.05
7. Bucket Wheel Reclaimer	2 Points	2,000 Tons/hr	0.00063 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.0%
8. Ship Unloading Facility Coal Surge Pile	Active	30 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.20
9. Coal Handling Transfer Points Ship Unloading Facility Coal Pile*	8 Points	2,200 Tons/Hr.	0.00041 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.23
10. Rail Car Unloading	Rotary Dumper	10,000 Tons/Day	0.4 lb/Ton	(97%) ^b	Wet Suppression	0.63
11. Coal Handling Transfer Points	2 Points	10,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.02
12. Coal Handling Transfer Points	2 Points	3,300 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.01
13. Coal Handling Transfer Points	6 Points	3,300 Tons/Day	0.2 lb/Ton ^c	(97%) ^b	Wet Suppression	0.62
14. Coal Handling Transfer Points	7 Points	5,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.04
15. Coal Storage At Plant*	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07
16. Coal Storage At Plant*	Inactive Piles	13 Acres	3.5 lb/Acre/day	(99%) ^a	Wetting Agent	0.002
17. Limestone Unloading	Rail Dumper	750 Tons/Day	0.4 lb/ton ^a	(97%) ^b	Wet Suppression	0.05
18. Limestone Transfer	1 Point	750 Tons/Day	0.2 lb/Ton ^a	(99.9%) ^b	Dry Collection	0.001
19. Cooling Towers	Drift	2 x 243,500 gal/min.	51,450 ppm solids (maximum) (40% < 50 microns diameter)	99.998%	Drift Elimination	12.66
20. Solid Waste Disposal Area	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07

* Revised process or emissions, May 1986.

⁺ Weighted average based on 1,500 and 700 STPH ship unloaders.^{**} Average of emission factors for individual sources.

a. Pedco, 1977.

b. Stoughton, 1980

c. EPA, 1979.

Table 6. Allowable Emission Limits (Revised: From PSD Permit: PSD-FL-010) (lb/hour; lb/MMBtu)

Emission Unit	SO ₂	NO _x	PM (Revised Original)	Opacity (Percent)
1. Steam Generating Boiler No.1 (6,144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
2. Steam Generating Boiler No. 2 (6,144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
3. Auxiliary boilers (254 MMBtu/hr maximum heat input total)	203; 0.8		25.0; 0.1	20
4. Ship Unloading (2 Grab Buckets)			1.0	10
5. Feeders to Conveyor A (2 Wet Suppression points)*			0.13	10
6. Conveyor Transfers 1 & 2 (2 points)*			0.57	10
7. Conveyor Transfer 3, 4, 5 & D to D by-pass (4 points)*			2.6	10
8. Conveyor Transfers 6 & 7 (2 points)*			1.0	10
9. Traveling Stacker (3 points)*			0.8	10
10. Bucket Wheel Reclaimer (2 points)*			0.6	10
11. Ship unloading facility coal storage pile			1.6	10
12. Coal handling transfer points ship unloading facility coal pile (8 points)*			1.8	10
13. Rail car unloading (Rotary Dumper)			5	10
14. Coal handling transfer points (6 wet suppression points)			5(each)	10
15. Coal handling transfer points (11 dry collection)			0.1(each)	10
16. Coal storage at plant. (10 acres active)			0.5	10
17. Coal storage at plant* (2 to 13-acre inactive piles)			0.02	10
18. Limestone unloading (rail dumper)			0.1	10
19. Limestone transfer points			0.4(each)	10
20. Cooling towers			67(Each tower)	N/A

* Revised emission unit, May 1986.

Attention: Bruce Mitchell

Date: 8/5/98

Company: FDEP

Number of Pages: 2

Fax Number: 18509226979

Voice Number: 19044881344

From: Liz Deken

Company:

Fax Number: 573-785-2720

Voice Number: 573-785-2720

Subject: SJRPP Material Handling Permit Corrections

Comments:

Here is the list of points that actually exist at the SJRPP facility that Bert Giannaza indicated would be provided to you. A copy has also been provided to Syed Arif to look at for corrections that may be needed to the PSD permit.

You can call Bert or myself (573.785.2720) if you have questions.

Thanks

Liz Deken

Table 2. Fugitive Emissions and Control Summary (Revised: from PSD Permit: PSD-FL-010)

Process	Type	Amount	Factor	Control	Technique	Emissions (Grams/sec)
1. Ship Unloading	2 Grab Buckets	2,200 Tons/hr	0.0016 lb/Ton ⁺	70.0%	Suppression, Enclosure	0.13
2. Feeders to Conveyor A.	2 Points	2,200 Tons/hr	0.00039 lb/Ton	85.0%	Suppression, Enclosure	4.02
3. Conveyor Transfers 1 and 2.	2 Points	2,200 Tons/hr	0.00087 lb/Ton**	85.0%	Suppression, Enclosure	0.07
4. Conveyor Transfers 3, 4, 5 and D to D by-pass.	4 Points	2,200 Tons/hr	0.00118 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.33
5. Conveyor Transfers 6 and 7.	2 Points	2,000 Tons/hr	0.00106 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.13
6. Traveling Stacker	3 Points: 1 Point	2,200 Tons/hr	0.00031 lb/Ton	75.0%	Enclosure, Conditioned Material	0.02
	1 Point	2,200 Tons/hr	0.00039 lb/Ton	75.0%	Enclosure, Conditioned Material	0.03
	1 Point	2,200 Tons/hr	0.00017 lb/Ton	0.0%		0.05
7. Bucket Wheel Reclaimer	2 Points	2,000 Tons/hr	0.00063 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.0%
8. Ship Unloading Facility Coal Surge Pile	Active	30 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.20
9. Coal Handling Transfer Points Ship Unloading Facility Coal Pile*	8 Points	2,200 Tons/Hr.	0.00041 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.23
10. Rail Car Unloading	Rotary Dumper	10,000 Tons/Day	0.4 lb/Ton	(97%) ^b	Wet Suppression	0.63
11. Coal Handling Transfer Points	2 Points	10,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.02
12. Coal Handling Transfer Points	2 Points	3,300 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.01
13. Coal Handling Transfer Points	6 Points	3,300 Tons/Day	0.2 lb/Ton ^c	(97%) ^b	Wet Suppression	0.62
14. Coal Handling Transfer Points	7 Points	5,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.04
15. Coal Storage At Plant*	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07
16. Coal Storage At Plant*	Inactive Piles	13 Acres	3.5 lb/Acre/day	(99%) ^a	Wetting Agent	0.002
17. Limestone Unloading	Rail Dumper	750 Tons/Day	0.4 lb/ton ^a	(97%) ^b	Wet Suppression	0.05
18. Limestone Transfer	1 Point	750 Tons/Day	0.2 lb/Ton ^a	(99.9%) ^b	Dry Collection	0.001
19. Cooling Towers	Drift	2 x 243,500 gal/min.	51,450 ppm solids (maximum) (40% < 50 microns diameter)	99.998%	Drift Elimination	12.66
20. Solid Waste Disposal Area	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07

* Revised process or emissions, May 1986.

+ Weighted average based on 1,500 and 700 STPH ship unloaders.

** Average of emission factors for individual sources.

a. Pedco, 1977.

b. Stoughton, 1980

c. EPA, 1979.

Table 6. Allowable Emission Limits (Revised: From PSD Permit: PSD-FL-010) (lb/hour; lb/MMBtu)

Emission Unit	SO ₂	NO _x	PM (Revised Original)	Opacity (Percent)
1. Steam Generating Boiler No.1 (6,144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
2. Steam Generating Boiler No. 2 (6,144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
3. Auxiliary boilers (254 MMBtu/hr maximum heat input total)	203; 0.8		25.0; 0.1	20
4. Ship Unloading (2 Grab Buckets)			1.0	10
5. Feeders to Conveyor A (2 Wet Suppression points)*			0.13	10
6. Conveyor Transfers 1 & 2 (2 points)*			0.57	10
7. Conveyor Transfer 3, 4, 5 & D to D by-pass (4 points)*			2.6	10
8. Conveyor Transfers 6 & 7 (2 points)*			1.0	10
9. Traveling Stacker (3 points)*			0.8	10
10. Bucket Wheel Reclaimer (2 points)*			0.6	10
11. Ship unloading facility coal storage pile			1.6	10
12. Coal handling transfer points ship unloading facility coal pile (8 points)*			1.8	10
13. Rail car unloading (Rotary Dumper)			5	10
14. Coal handling transfer points (6 wet suppression points)			5(each)	10
15. Coal handling transfer points (11 dry collection)			0.1(each)	10
16. Coal storage at plant. (10 acres active)			0.5	10
17. Coal storage at plant* (2 to 13-acre inactive piles)			0.02	10
18. Limestone unloading (rail dumper)			0.1	10
19. Limestone transfer points			0.4(each)	10
20. Cooling towers			67(Each tower)	N/A

* Revised emission unit, May 1986.

SJRPP Material Handling Transfer Points for Permitting

<u>Limestone</u>		<u>Points</u>
1)	Limestone receiving bin with 3 Unloading hoppers	1
2)	Unloading hoppers to FLD-1 Belt	3
3)	FLD-1 to L0	1
4)	L0 to L1	1
5)	L1 to L2	1
6)	L2 to Storage Pile	1
7)	Reclaim hopper	1
8)	Hopper to 9LC-02	1
9)	9LC-02 to Silos(2)	2
10)	Silos to 1LC-01,2LC-01 (to ball mills)	2
Total		14

<u>Coal-Yard</u>		<u>Points</u>
1)	Receiving bin with 4 Unloading hoppers	1
2)	4 Unloading hoppers to FCD-1,2,3,4	4
3)	FCD-1,2,3,4 to CO	4
4)	CO to C1	1
5)	C1 to C2	1
	C1 to emergency stackout	1
6)	C2 to C4	1
7)	C4 to C5	1
	C4 to CT6	1
8)	C5 to C6	1
9)	C6 to storage pile	1
	Reclaim to C6 (grab and dump)	2
	C6 to C4	1
10)	Surge Bins	
	C2 to Surge Bin	1
	C3 to Surge Bin	1
	C4 to Surge Bin	1
	Surge Bin to FCR-A,B	2
11)	FCR-A,B to Crushers (2)	2
	Crushers (2)	2
	Crushers to C7,8	2
12)	C7,8 to C9,10	2
13)	C9,10 to 14 Coal Storage Silos	14
Total		47

<u>Coal-Shipunloader</u>		<u>Points</u>
14)	Bucket to Hopper (grab & dump)	2
15)	Hopper to Belt	1
16)	Hopper Belt to CT1	1
17)	CT1 to CT2	1
18)	CT2 to CT3	1
19)	CT3 to CT4	1
20)	Reclaimer to CT4 (grab, dump,dump)	3
21)	CT4 to CT5	1
	CT4 to S1 traveling conveyor	1
	S1 Traveling conv. to S2 boom conv.	1
	S2 boom conv to storage pile	1
22)	CT5 to C2	1
23)	CT6 to CT4	1
Total		18

<u>Coal-Petooko Feeder System</u>		<u>Points</u>
24)	Hopper	1
	Hopper to SPC-1	1
	SPC-1 to PC-1	1
	PC-1 to C4	1
Total		4

<u>Fly & Bottom Ash Handling System</u>		<u>Points</u>
25)	Flyash	
	U#1-A&B Saleable silo Baghouse (2) & roof vents (2)	4
	U#1-1 Non-saleable Silo Baghouse & roof vent	2
	U#1-A loadout Silo discharge (2) & roof vent (1)	3
	U#1-B loadout Silo discharge (2) & roof vent (1)	3
	U#2-A&B Saleable silo Baghouse (2) & roof vents (2)	4
	U#2-A Non-saleable Silo Baghouse & roof vent	2
	U#2-A loadout Silo discharge (2) & roof vent (1)	3
	U#2-B loadout Silo discharge (2) & roof vent (1)	3
26)	Bottom Ash	
	U#1-A&B Silo to conveyor belt	2
	Conveyor belt to truck	1
	U#2-A&B Silo to conveyor belt	2
	Conveyor belt to truck	1
Total		30

Grand Total 111

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3130



July 7, 1998

RECEIVED

JUL 08 1998

BUREAU OF
AIR REGULATION

Mr. Bruce Mitchell
Environmental Administrator
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Northside Generating Station
Title V Permit - Supplemental Information

Dear Mr. Mitchell:

Below please find additional comments relating to the Northside Generating Station Title V permit.

1. We request letter authorization, to be added to the Title V permit, to operate an auxiliary rental boiler rated at up to 300 HP. The primary fuel would be natural gas with #2 oil serving as backup in the event of gas curtailment.
2. We request clarifying language stating that the heat input value calculated by the CEMs is not the method of compliance with the heat input limit.
3. Attached please find a heat input curve for the Northside combustion turbines. Since manufacturer curves are unavailable, this curve is a regression curve developed empirically in-house. As such the heat input at each temperature is a nominal value (with approximately 50% of observations above the line and 50% of observations below the line) and should not be considered a limit, only a nominal value for determination of full load for VE testing purposes.
4. Attached please find an updated O&M plan for the Northside Generating Station.

Mr. Mitchell

July 7, 1998

Page Two

5. In condition A.3.b. the sum of the oil inputs to units 1,2, and 3 listed as 1,440,000 is incorrect. Since each unit is limited, this limit is redundant and should be removed. Also, since fuel heat content varies, and the unit is limited on heat input as opposed to mass input, this redundant limit should be removed.

6. Attached please find the pertinent pages from our Title V permit application showing corrections to the stack heights and diameters.

7. On page 8, item A.11, please add a reference to item A.17.

If you have any questions with regard to this matter, please contact me at (904) 632-6247.

Sincerely,

N. Bert Gianazza, P.E.
Environmental Health
and Safety Group

NBG

bc: C. Maire
G. Connell
B. Wray
B. Gianazza
S. Stokes
File

IVADDNS

AMBIENT TEMP #	TEMP °F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR	AMBIENT TEMP #	TEMP °F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR
1	20	67.97	67.63	868	60	58.77	58.43	747	
2	21	67.74	67.40	865	61	58.54	58.20	744	
3	22	67.51	67.17	861	62	58.31	57.97	741	
4	23	67.28	66.94	858	63	58.08	57.74	738	
5	24	67.05	66.71	855	64	57.85	57.51	735	
6	25	66.82	66.48	852	65	57.62	57.28	733	
7	26	66.59	66.25	849	66	57.39	57.05	730	
8	27	66.36	66.02	846	67	57.16	56.82	727	
9	28	66.13	65.79	842	68	56.93	56.59	724	
10	29	65.90	65.56	839	69	56.70	56.36	721	
11	30	65.67	65.33	836	70	56.47	56.13	719	
12	31	65.44	65.10	833	71	56.24	55.90	716	
13	32	65.21	64.87	830	72	56.01	55.67	713	
14	33	64.98	64.64	827	73	55.78	55.44	710	
15	34	64.75	64.41	824	74	55.55	55.21	708	
16	35	64.52	64.18	821	75	55.32	54.98	705	
17	36	64.29	63.95	818	76	55.09	54.75	702	
18	37	64.06	63.72	815	77	54.86	54.52	699	
19	38	63.83	63.49	812	78	54.63	54.29	697	
20	39	63.60	63.26	809	79	54.40	54.06	694	
21	40	63.37	63.03	806	80	54.17	53.83	691	
22	41	63.14	62.80	802	81	53.94	53.60	689	
23	42	62.91	62.57	799	82	53.71	53.37	686	
24	43	62.68	62.34	796	83	53.48	53.14	683	
25	44	62.45	62.11	793	84	53.25	52.91	681	
26	45	62.22	61.88	791	85	53.02	52.68	678	
27	46	61.99	61.65	788	86	52.79	52.45	675	
28	47	61.76	61.42	785	87	52.56	52.22	673	
29	48	61.53	61.19	782	88	52.33	51.99	670	
30	49	61.30	60.96	779	89	52.10	51.76	667	
31	50	61.07	60.73	778	90	51.87	51.53	665	
32	51	60.84	60.50	773	91	51.64	51.30	662	
33	52	60.61	60.27	770	92	51.41	51.07	660	
34	53	60.38	60.04	767	93	51.18	50.84	657	
35	54	60.15	59.81	764	94	50.95	50.61	654	
36	55	59.92	59.58	761	95	50.72	50.38	652	
37	56	59.69	59.35	758	96	50.49	50.15	649	
38	57	59.46	59.12	755	97	50.26	49.92	647	
39	58	59.23	58.89	753	98	50.03	49.69	644	
40	59	59.00	58.66	750	99	49.80	49.46	641	
41	60	58.77	58.43	747	100	49.57	49.23	639	

KSCT
 Y INTERCEPT 72.576
 SLOPE 0.2301

DISPATCH HEAT RATE CURVES

A = 1.78910E-02
 B = 8.82453E-00
 C = -1.80705E-02
 D = 8.20028E-04
 AA = 3.40192E-01
 BB = 9.99987E-01
 CC = 1.79499E-07
 DATE: 05/21/93

Jacksonville Electric Authority**Operation and Maintenance Plan****Operation and Maintenance**

Following is a list of activities to be accomplished for the control of particulate emissions from units in or impacting the Duval County maintenance areas. These schedules apply to each on-line unit.

Daily:

1. Check and clean burners (renew tips as necessary) daily.
2. Conduct one complete soot-blowing cycle (or as needed).
3. Maintain optimum fuel oil temperature and pressure at all times.

Weekly:

1. Clean low pressure fuel oil strainers (more frequently if required).
2. Clean other fuel oil strainers as needed by monitoring the pressure drop.

Annually:

1. Clean the boiler and inspect baffles.
2. Inspect the:
 - (a) wind box;
 - (b) registers;
 - (c) diffusers;
 - (d) refractory throat;
 - (e) scanners;
 - (f) ignitors.
3. Adjust the air registers for optimum flame pattern with assistance from Engineering Services.
4. Replace burner tips (more frequently if required).

Operation and Maintenance Plan
Page -2-

As Needed:

1. **Wash furnace and air heaters.**

Major Outages:

1. **Overhaul the:** (a) turbine/generator
(b) boiler and auxiliary equipment.
2. **Calibrate the:** (a) flow meters including sensing line checks;
(b) pneumatic controls;
(c) temperature gauges.

Performance Parameters

The following operational parameters are to be recorded on a bi-hourly basis.

1. **Steam flow.**
2. **Burner oil pressure.**
3. **Burner oil temperature.**

Fuel Type: Number 6 residual oil unless otherwise stated.

Records

Records of all operating data and maintenance procedures listed herein shall be retained at the Generating Station for review, upon request, for a period of five (5) years.

LB/O&MPlan.doc

04/29/98

Best Available Copy

Emissions Unit Information Section 1 of 6**E. EMISSION POINT (STACK/VENT) INFORMATION**
(Regulated Emissions Units Only)**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:			
Stack 1			
2. Emission Point Type Code:			
<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
A single stack serving a single boiler			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
N/A			
5. Discharge Type Code:			
<input type="checkbox"/> D	<input type="checkbox"/> F	<input type="checkbox"/> H	<input type="checkbox"/> P
<input type="checkbox"/> R	<input checked="" type="checkbox"/> V	<input type="checkbox"/> W	
6. Stack Height:	250	168	feet
7. Exit Diameter:	16	11.1	feet
8. Exit Temperature:	approx. 285		°F

Best Available Copy

Emissions Unit Information Section 2 of 6**E. EMISSION POINT (STACK/VENT) INFORMATION**
(Regulated Emissions Units Only)**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: Stack 2		
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4		
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): A single stack serving a single boiler.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A		
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W		
6. Stack Height:	195 300	feet
7. Exit Diameter:	11.1 16	feet
8. Exit Temperature:	approx. 280	°F

Emissions Unit Information Section 3 of 6**E. EMISSION POINT (STACK/VENT) INFORMATION**
(Regulated Emissions Units Only)**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		
Stack 3		
2. Emission Point Type Code:		
<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3 <input type="checkbox"/> 4
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
a single stack serving a single boiler		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:		
<input type="checkbox"/> D	<input type="checkbox"/> F	<input type="checkbox"/> H <input type="checkbox"/> P
<input type="checkbox"/> R	<input checked="" type="checkbox"/> V	<input type="checkbox"/> W
6. Stack Height:	235.3 300	feet
7. Exit Diameter:	18.5 23	feet
8. Exit Temperature:	approx. 305	°F

REGULATORY AND ENVIRONMENTAL SERVICES DEPARTMENT

FAX COVER SHEET

AIR AND WATER QUALITY DIVISION

117 West Duval Street, Suite 225
Jacksonville, Florida 32202
(904) 630-3484 (Office)
(904) 630-3638 (Fax)

RECEIVED

MAY 29 1998

BUREAU OF
AIR REGULATION

DATE: 5/29/98

TIME: 11:25am

TO: Bruce Mitchell

FAX #: 850-922-6979

MESSAGE: Al's letter

FROM: Dana Brown

NUMBER OF PAGES FAXED (Including cover): 3

PLEASE CALL (904) 630-3484 IF YOU DO NOT RECEIVE ALL THE PAGES OF THIS FAX

OR IF TRANSMISSION IS UNCLEAR. OUR FAX NUMBER IS (904) 630-3638.



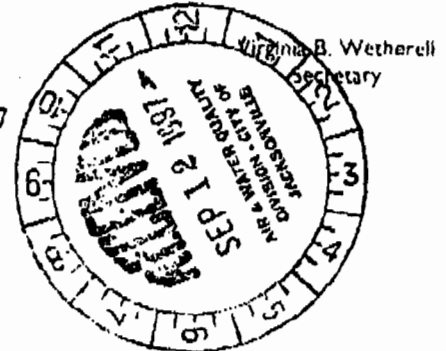
BEST AVAILABLE COPY

Department of Environmental Protection

Lawton Chiles
Governor

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

September 10, 1997



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Wayne E. Tutt, Associate Engineer
Regulatory & Environmental Services
Department
Air & Water Quality Division
421 West Church Street, Suite 422
Jacksonville, Florida 32202-4111

Re: Site Certification No. PA 81-13
St. Johns River Power Park Units #1 & #2

Dear Mr. Tutt:

This correspondence is provided to address the July 30, 1997 letter to Buck Oven regarding semiannual testing for Carbon Monoxide (CO) and Sulfuric Acid Mist (H₂SO₄). The request to the Florida Department of Environmental Protection was related in the October 28, 1996 modifications to the Conditions of Certification for the St. Johns River Power Park (SJRPP). The modified conditions authorized the co-firing of petroleum coke and coal. Conditions I.A.2.h. and I.A.2.i. requires semiannual testing of CO and H₂SO₄ for the first two years of co-firing and annual testing for the next three years, as information demonstrating that the operational changes (i.e., co-firing petroleum coke and coal) did not result in a significant net increase in emissions. Additionally, quarterly continuous emission monitoring data for CO was required. The same conditions were included in the modification to the Prevention of Significant Deterioration (PSD) approval (PSD-FL-010(B), October 14, 1996).

The conditions in the modified PSD permit and the Conditions of Certification were included as a mechanism to assure that a significant increase in CO or H₂SO₄ emissions did not occur as a direct result of co-firing petroleum coke. Because of the variability of these pollutants during the combustion process, SJRPP is required by the Department to perform semiannual testing during the first two years to determine if significant emission increases have occurred. The intent of the conditions were to review emissions over a long term i.e., two years, to determine if an increase has occurred.

In order to compare whether a significant increase has occurred, the test data should be evaluated against all the baseline information provided by SJRPP. For CO, the single 1995 testing is not representative, since CO emissions can be highly variable based on combustion conditions and fuel properties such as Hardgrove Grindability Index. SJRPP provided information during the permitting process that indicated that CO emissions could be highly variable; during normal

Mr. Wayne E. Tutt
Page 2
September 10, 1997

operation when firing coal could range from less than 10 ppm to 500 ppm. Therefore, a long-term baseline CO emissions level must be used for comparing semiannual or annual testing. The use of Appendix C is not an appropriate mechanism in determining significant increases. The June 1997 test data provided by SJRPP indicate CO emissions ranging between 75 and 120 ppm. These CO emissions are within the CO baseline emission when burning coal, therefore, there was no significant increase in CO emissions.

Similar to CO, H_2SO_4 emission were expected to vary due to combustion effects. While the 1995 baseline tests indicated a H_2SO_4 concentration of 6.19 ppm, further baseline tests conducted in February 1997 by SJRPP indicated a H_2SO_4 concentration of 8.16 ppm. The H_2SO_4 concentration for the June 1997 test was clearly below the baseline tests conducted for coal firing. Thus, no increase in emissions of H_2SO_4 has occurred.

Overall, no specific short-term emission limits were established for CO and H_2SO_4 as a result of petroleum coke use. The Department will make a future determination whether or not significant annual increases have occurred based on analysis of future actual representative annual emissions. This determination will be based on information provided by SJRPP through semi-annual tests, continuous emission monitoring data, etc.

For your information, the Sierra Club challenged issuance of the permit. SJRPP and the Sierra Club jointly obtained the independent assistance of Dr. William C. Zegel, now President of Air and Waste Management Association. He determined that CO and H_2SO_4 emissions increases are not occurring as a result of burning a petroleum coke blend. As a result, the Sierra Club dropped its request for an administrative hearing.

As more testing is conducted, similar test comparisons will be made. If there are any questions please call Syed Arif at (850) 488-1344.

Sincerely,



A. A. Linero, P.E., Administrator
New Source Review Section

AAI/sa

cc: H. Owen, DEP/SCO
W. Walker, RESD

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139

April 20, 1998



Mr. Bruce Mitchell
Florida Dept. of Environmental Regulation
2600 Blair Stone Rd.
Tallahassee, FL.

RECEIVED

APR 23 1998

BUREAU OF
AIR REGULATION

RE: Jacksonville Electric Authority (JEA)
Northside Generating Station (NGS) / St. Johns River Power Park (SJRPP)
Title V Permit No. 0310045-001-AV

Dear Mr. Mitchell:

Pursuant to our telephone conversations concerning the above referenced permit, the following comments indicate discrepancies that have been identified in the final permit that are not consistent with existing SJRPP PSD permit (PSD-FL-010), SJRPP's Conditions of Certification (PA 81-13), or applicable regulations. In addition, several clarifying amendments are requested at the end of this letter.

REQUESTED REVISIONS: DISCREPANCIES

Section II. Facility-Wide Conditions

OK Condition 2. This Condition should be revised as follows: "No person shall not cause, suffer, allow, or permit"

Section III. Emissions Units and Conditions

*2-1-98
Spoke to Syd - he
said that he had spoken
No averaging allowed
just lbs/hr*

D.3.c. This Condition states that the maximum weight of petroleum coke burned shall not exceed 100,000 pounds per hour. The language "averaged over 24 hours" should be changed to "30 day rolling average" to correspond to the basis of the emission limits and the fact that the pounds per hour limits are correspondent to such.

No D.3.d. The third sentence in this provision prohibiting the use of used oil except when firing at "normal operating temperatures" is ambiguous and should be deleted. If this was intended to mean used oil could not be fired during startup and shutdown, this prohibition is included in the second sentence of this provision.

OK D.7.a. The maximum ash content of the coal is 18%, by weight and not 0.18% by weight.

*1-1-98
V'd to Syd/AI -
8 from JEA for
PSD-FL-010(B)*

OK D.10.a. The formula should read: $SO_2 \text{ (lb/MMBtu)} = (0.2 \times C/100) + 0.4$ *PSD-FL-010(B) has it as "4"?*

No! D.10.c. The formula should read: $SO_2 \text{ (lb/MMBtu)} = [0.1653 \times C \times S - 0.4 \times C + 4] \times 1/100$

OK D.11.(1) The phrase "and 90 percent reduction" should be included.

OK

D.13.b. Limiting the petroleum coke sulfur content to no more than 4.0 percent, by weight, dry basis is not correct. This should read "The blend of petroleum coke and coal sulfur content shall not exceed 4.0 percent, by weight." The 4% limit applies to the fuel blend, not the petcoke individually. Also, there is no reference to "dry basis" in the existing permits and therefore it should be deleted here.

OK

D.14.(2) This provision should be revised as follows: "If emissions of SO_2 to the atmosphere are equal to or less than"

OK

D.18. This Condition should be deleted because there is no comparable condition in PSD-FL-010. PSD-FL-010 simply states that CO emissions will be minimized utilizing combustion controls.

Title V Permit

Page 2

D.19. This Condition should be deleted in its entirety because these provisions apply to 40 CFR Subpart D units, and the SJRPP units are subject to 40 CFR Subpart Da. Further, subparagraph (1) of Condition D.19 is redundant to Condition D.8.

D.20. These Conditions should be deleted because these emissions units are NSPS units subject to the excess emissions provisions of 40 CFR Part 60, which are applicable as a matter of Florida law because 40 CFR Part 60 is incorporated by reference in Rule 62-204.800, Fla. Admin. Code. Further, the applicable excess emissions provisions of 40 CFR Part 60 are already contained in this Title V permit under Condition D.25 and the Appendix containing selected provisions from 40 CFR 60 Subpart A.

D.44. D.XX. A Condition should be added allowing data from RATA tests to be utilized for performance test purposes. This request is similar to a request by Kissimmee Utility Authority which has already been approved by DEP without the need for an Alternate Sampling Procedure (ASP).

D.52(a)4. Subparagraph b. should be revised because there is no annual stack test requirement for units that utilize CEMs to determine compliance with specific pollutants (SO₂ and NO_x), and subparagraph c. should be deleted because this unit is not subject to a NESHAP. See comment on Condition D.53 below.

D.52(a)5. The sentence is incomplete and should read "does not burn liquid and/or solid fuel".

D.53. The Conditions of Certification were modified to remove stack tests for sulfur dioxide and nitrogen oxides in lieu of CEMS data which was based on the December 15, 1995 guidance document by Howard Rhodes - "Guidance Regarding Annual Compliance Testing Exemption for Facilities Utilizing CEMs." Therefore, these two parameters should be removed from this item. Note that the PSD permit does not specifically require a stack test.

D.67. This Condition should be revised as follows to reflect the fact that this unit does not burn gas, and that hourly records are only kept regarding the amounts of each fuel fired; other records should only be required on a per shipment basis: "The owner or operator shall create and maintain for each emissions unit hourly records of the amount of each fuel fired. the ratio of fuel oil to gas if co-fired Records regarding the heating value, and sulfur and ash content, percent by weight, of each fuel fired will either be provided by the vendor or prepared by the permittee, and maintained by the permittee for each shipment of fuel received."

D.68. There are no requirements to submit this data per SJRPP permit requirements and therefore should not be required. Records are maintained on site for agency review as needed.

Subsection E. Auxiliary Boilers

SJRPP Auxiliary Boilers have been removed from SJRPP and deleted from the Conditions of Certification. Therefore this section is not warranted and any reference to the auxiliary boilers throughout the permit should be deleted.

Subsection F. Coal Storage Yard and Transfer Systems

F.8. Because this unit is subject to the NSPS under 40 CFR Part 60, Subpart Y, the excess emissions provisions contained in 40 CFR Part 60 are applicable for any NSPS emission limits for this unit. Accordingly, Conditions F.8 and F.9 should contain the following introductory language: "For emission limits not derived from NSPS, excess emissions" See comment on Conditions D.20 and D.21 above.

added to permit notes

D.44.

sip annual req

No!

OK

still how to do RATA tests

do not have PA chgs

some edit done

some edit made

?

OK

No! 3 blends contains

OK

F.8.

CLARIFYING AMENDMENTS

Table of Contents

OK Section III. D. It is understood that the Megawatts are in the permit for informational purposes only.

Placard Page

There are numerous references in the Title V permit to the "attached" Tables in PSD-FL-010. These Tables should therefore be attached as part of the Title V permit, and so indicated on this page.

Section I. Facility Information

Subsection A. Facility Description: Petroleum coke should be referenced.

Section III. Subsection A.

Description. The commence operation date for unit 2 should be changed from "1972" to "November 16, 1966."

A permitting note should be included with the heat input numbers indicating that the heat input is included only for purposes of determining the capacity at which testing occurred, and that a heat input determination need only be made while testing.

A.5. This Condition reflects an Order issued by the Department allowing annual compliance testing and a 40% opacity limit. This Order should be attached to this Title V permit and the language revised as follows: "For Boilers Nos. 1 and 3, visible emissions shall not exceed 40 percent opacity. ~~DEP has determined that these units Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually~~" A copy of the Order is attached for your convenience.

No change

A.8. This Condition should be revised to reflect the specified compliance test method as follows: "Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured in accordance with Condition A.22. ~~by applicable compliance methods.~~"

A.10. This Condition should be revised to reflect the specified compliance test method as follows: "SO₂ emissions shall not exceed 1.98 pounds per million Btu heat input, as measured in accordance with Conditions A.17, A.23 and A.24. ~~by applicable compliance methods.~~"

A.12. This Condition should be revised to reflect the specified compliance test method as follows: "For Boiler No. 3, nitrogen oxides emissions shall not exceed 0.30 lb/mmBtu heat input, as measured in accordance with Condition A.18. ~~by applicable compliance methods.~~"

A.13. This Condition states that JEA can only burn used oil that is generated by JEA, yet the compliance provisions in this Condition and throughout Subsection A. (e.g., A.34, A.38) refers to "delivery" of the used oil, and analysis by the vendor. These conditions should be clarified to reflect the fact that used oil is not "delivered."

has does it not the new no change!

A.18. The citation to this Condition should be changed from "Rule 62-296.450(1)(e)4." to "Rule 62-296.405(1)(e)4."

A.31.1. This Condition should be revised as follows: "(a)4.a. visible emissions ~~if there is an applicable standard;~~ b. particulate matter; c. sulfur dioxide; d. nitrogen oxide ~~Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated pollutant; and c. Each NESHAP pollutant, if there is an applicable standard.~~"

No change parts of the rule

A.11.1. did not amend on 3

see s.c.s A.17, A.22 at A.24

see s.c. A.18.

JEA is still subject to all provisions even if using used oil from its activities!

016 - SERPP #1
017 #2
018 Aux Boilers A, B

Subsection B.

OK A permitting note should be included with the heat input numbers indicating that the heat input is included only for purposes of determining the capacity at which testing occurred, and that a heat input determination need only be made while testing.

B.1. In accordance with the Title V application and existing operating permit, the heat input when firing natural or LP gas should be 123.5, not 120.0. Also, the authority for this provision should state that the application was filed on June 14, 1996, rather than 1997.

Subsection C.

OK Description. As indicated in the Title V application, CT No. 5 began commercial service in February of 1974, not December 1974.

OK
FCC book shows 12/74.

C.3. This Condition should be revised as follows: "Only ~~(virgin)~~ new No. 2"

Subsection D.

The description should be revised to reflect the correct dates of initial operation as indicated in the application: boiler No. 1 (December 15, 1986), and boiler No. 2 (March 24, 1988).

OK
FCC book is different. 0/2

OK A permitting note should be included with the heat input numbers indicating that the heat input is included only for purposes of determining the capacity at which testing occurred, and that a heat input determination need only be made while testing.

OK D.15.(1) The reference to "bituminous coal" should be changed to "coal or ~~coal~~ coal/coke blend."

coal-petroleum coke blend

did some edit

OK D.15.(2) The reference to "All other fuels - oil" is ambiguous and should be changed to "liquid fuels." ~~Fuel oil~~

OK D.30. Last sentence "is experienced" is stated twice.

OK D.37. The word "acceptable" in the last sentence should be capitalized.

D.70, D.71, D.72. The authority for these Conditions should reference the Conditions of Certification.

D.75. The authority for this Condition should cite to 40 CFR 60.48a(e)(1) and reference Condition D.44.

no; this is cited in D.44; added a reference to D.44

did some edit OK

Subsection G. Limestone and Flyash Handling

OK The word "generally" should be removed from the last sentence in the system description.

OK G.6.c. This provision should be made consistent with the permit language as well as G.7a. which is "Limestone Silo," not "limestone day silo."

Subsection H. Cooling Towers

What BACT does this description refer to?

is linked due to Tables 2 and 3, not BACT definition

Title V Permit
Page 5

Subsection IV. Acid Rain

deleted
The description denotes MW. It is understood that this is for informational purposes only.

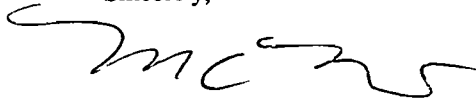
OK
A.5. All references to the "Jacksonville Electric Company" should be changed to "Jacksonville Electric Authority."
3.

Tables 1-1, and 2-2

These Tables should be revised in accordance with the comments above.

If you have any questions regarding these comments, please contact Bert Gianazza at (904)665-6247 for issues relating to the Northside facility, and Jay Worley at (904)751-7729 for issues relating to the Power Park.

Sincerely,



M. Claudia Maire
Vice President
Environmental Health & Safety

Date: 3/23/98 9:01:14 AM
From: Hamilton Buck Oven TAL
Subject: Re: JEA Power Park

In my opinion the conditions do not need to be modified. There are specified limits for coal handling facilities and limits on limestone handling already in the conditions. the coal handling equipment on blount Island is an existing source. As long as the materials handled by that source and its control equipment don't exceed the emission limitations, no violation will occur. I am not sure how much coal is actually delivered at Blount island. I suspect that most of the coal comes in via rail directly to the plant. Yes, the conditons of certification provide for automatic modification of the conditions for amendments to the PSD or Title V permits. No new fees have been submitted, although some of the modification fee is still in our account. A letter can act as an amendment to the site certification application.

RECEIVED

MAR 23 1998

**BUREAU OF
AIR REGULATION**

EV 981603



March 16, 1998

Mr. Hamilton Oven, P.E.
Administrator, Power Plant Siting
Florida Dept. of Environmental Protection
2600 Blair Stone Rd.
Mail Station 48
Tallahassee, FL 32399-2400

RE: St. Johns River Power Park (SJRPP)
Jacksonville Electric Authority (JEA)
Coal Unloading Facility - Limestone / Equivalent Unloading

Dear Mr. Oven:

A notification concerning the above referenced limestone unloading operation and the evaluation of the potential emissions were submitted to your agency on 02-18-98. Pursuant to our 03/11/98 telephone conversation, your agency concurred with the notification and emissions evaluation, therefore, limestone or equivalent shall be made available through the SJRPP coal unloading facility.

Please contact me at (904)665-8729 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jay Worley', is written over the typed name and title.

Jay Worley
Director Environmental & Safety

xc: M. Costello, FDEP ✓
E. Frey, FDEP
A. Linero, FDEP
W. Tutt, RESD

EV 981802

CERTIFIED MAIL

February 18, 1998

Mr. Hamilton Oven, P.E.
Administrator, Power Plant Siting
Florida Dept. of Environmental Protection
2600 Blair Stone Rd.
Mail Station 48
Tallahassee, FL 32399-2400



RE: St. Johns River Power Park (SJRPP)
Jacksonville Electric Authority (JEA)
Conditions of Certification PA 81-13
PSD FL-010

Dear Mr. Oven:

The St. Johns River Coal Terminal (SJRCT), addressed in the above referenced Conditions of Certification and PSD, is a solid fuel unloading facility located on Blount Island on the St. Johns River. The facility unloads water-borne solid fuel shipments where it is conveyed to SJRPP for the generation of electricity.

SJRCT is located adjacent to the Jacksonville Port Authority (JPA), a major importer of materials. Pursuant to telephone conversations with you and Mr. Costello (Florida Dept. of Environmental Protection's Bureau of Air Regulation), SJRPP is formally notifying you that approximately 270,000 ton/year/unit annually of limestone or equivalent will be unloaded at the SJRCT using existing coal handling facilities. The limestone unloading operation will benefit SJRPP by taking advantage of the limestone market via water-borne suppliers in addition to our direct truck and rail deliveries.

The limestone or equivalent shall be conveyed via the existing enclosed conveyor system to SJRPP. The limestone or equivalent shall be temporarily stored in a designated area of the coal pile prior to movement by truck to the existing limestone storage area. Please find attached a document prepared by Kennard F. Kosky, P.E. (Golder Associates) which presents the results of an evaluation of the potential emissions of unloading limestone at the SJRCT. The TSP and PM₁₀ emissions are well within the 2.85 tons/year (0.65 lb/hr) authorized by Specific Condition I.A.4.b. for the limestone rail/truck unloading and transfer system. The maximum potential emissions are also within those authorized in the PSD approval.

Please contact me at (904)665-8729 if you have any questions or require any additional information regarding this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Worley". The signature is written over a large, hand-drawn oval.

Jay Worley
Director, Environmental & Safety

xc: M. Costello, (FDEP) ✓
E. Frey, (FDEP)
A. Linero, (FDEP)
W. Tutt, (RES D)

RECEIVED

FEB 20 1998

BUREAU OF
AIR REGULATION

11201 New Berlin Road

Jacksonville, FL 32226

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



**St. Johns River Power Park (SJRPP)
PSD-FL-010(B); PA 81-13
Ship Limestone Unloading and Conveyor Transfer
Emissions of Particulate Matter**

This document presents the results of an evaluation of the potential emissions of unloading limestone at the St. Johns River Coal Terminal and the transfer of limestone by the existing coal conveyors to the plant site. The evaluation was conducted using US EPA Emission Factors for Aggregate Handling and Storage Piles (Section 13.2.4 of AP-42). The maximum potential emissions from conveyors and transfer points are estimated not to exceed 0.6 tons/year (0.14 lb/hr) for TSP and 0.3 tons/year (0.07 lb/hr) for PM₁₀. This estimate was based on a maximum potential limestone usage of about 270,000 ton/year/unit, 4 percent sulfur fuel and 100 percent capacity factor. The TSP and PM₁₀ emissions are well within the 2.85 tons/year (0.65 lb/hr) authorized by Specific Condition I.A.4.b. for the limestone rail/truck unloading and transfer system. The maximum potential emissions are also within those authorized in the PSD approval.

Because the St. Johns River Coal Terminal commenced construction after August 31, 1983, the New Source Performance Standards relating to Nonmetallic Mineral Processing Plants (40 CFR 60.670-60.676) are applicable to the transfer of limestone. These NSPS cover both stack/vent emissions and fugitive emissions. Since the conveyors and transfer points are enclosed but do not have a stack or vent the opacity requirements of 60.672 apply. Initial performance tests using EPA Method 9 for opacity including provisions of 60.675(c) is required within 90 days of maximum production rate or 180 days from initial operation (i.e., limestone transfer).

A handwritten signature in black ink, appearing to read 'Kennard F. Kosky'.

Kennard F. Kosky, P.E.
Principal
Florida Professional Engineer License No. 14996
February 13, 1998

SEAL

Handwritten initials, possibly 'K/S', written in black ink.

Best Available Control Technology (BACT) Determination

Jacksonville Electric Authority

Duval County

The proposed facility is the construction of two 600 megawatt coal-fired electric utility steam generating units to be located in Jacksonville, Florida. The units will be designed for possible conversion to oil, gas or refuse firing. There will be an oil fired auxiliary boiler rated at 200 million Btu/hr estimated to have an annual capacity factor of 5 percent compared to 74 percent for the two units.

The plant will be located in Duval County which is classified nonattainment for the pollutant Ozone (17-2.16(1)(c) F.A.C.). It will be located in the area of influence of the Jacksonville particulate nonattainment area (17-2.13(1)(b) F.A.C.), however, the plant will not significantly impact the nonattainment area and is therefore exempt from the requirements of Section 17-2, 17 & 18 & 19 with respect to particulate emissions. The facility must comply with the provisions of 17-2.04 F.A.C. (Prevention of Significant Deterioration).

BACT Determination Requested by the Applicant:

<u>Pollutant</u>	<u>Emission Limit</u>
Particulates	0.03 lb/million Btu input
SO ₂	0.76 lb/million Btu input
NO _x	0.60 lb/million Btu input
CO	0.05 lb/million Btu input

Particulate emissions to be controlled using an Electrostatic Precipitator (ESP). SO₂ emissions to be controlled with a limestone wet scrubbing² system. There is no specific control technology for control of NO_x and CO emissions. BACT to be manufacturer's guarantee for^x state-of-the-art burner design parameters to minimize emissions.

Flyash emissions to be controlled using a pneumatic transfer system and bottom ash using a wet transfer system. Emissions from coal and limestone handling to be controlled by use of enclosed conveying systems with baghouses rated at 99.9 percent efficiency. Water suppression to control dust to be used as required.

Page Two

Date of Receipt of a Complete BACT Application:

February 27, 1981

Date of Publication in the Florida Administrative Weekly:

March 27, 1981

Review Group Members:

Steve Pace, Jacksonville Bio-Environmental Services
Johnny Cole, DER, St. Johns River Subdistrict
Buck Oven Power Plant Siting Section
Bob King, DER, Bureau of Air Quality Management
Tom Rogers, DER, Air Modeling Section

Bio-Environmental Services recommended a 65% reduction in NO_x emissions, or 0.5 lb/million Btu heat input. This was the only exception to unanimous acceptance of the NSPS emission limits as BACT.

BACT Determination by DER:

<u>Pollutant</u>	<u>Emission Limit</u>
Particulates	0.03 lb/million Btu input
SO ₂	0.76 lb/million Btu input
NO _x	0.60 lb/million Btu input
CO	0.05 lb/million Btu input

Justification of DER Determination:

NSPS, Subpart Da, Standards of performance for electric utility steam generating units for which construction is commenced after September 18, 1978, is determined as BACT for the proposed project. The proposed control equipment is state-of-the-art and determined as BACT.

Emissions from the auxiliary boiler are minor compared to the main units. The auxiliary boiler will operate only when one of the main units is not in operation. Limited operation of the auxiliary boiler is determined as BACT.

Details of the Analysis May be Obtained by Contacting:

Edward Palagyi, BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Page Three

Recommended By:

C. H. [Signature]

for Steve Smallwood, Chief, BAQM

Date:

5/6/81

Approved:

Victoria Tschinkel
Victoria Tschinkel, Secretary

Date:

5/7/81



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

Notice of Final Permit Amendment

In the Matter of an
Application for Permit Amendment

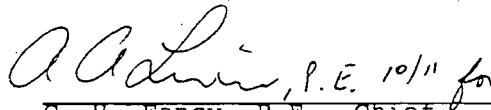
DEP File No. PSD-FL-010(B)

Mr. Richard Breitmoser, P.E.
Environmental Health & Safety Group
St. Johns River Power Park
11201 New Berlin Road
Jacksonville, Florida 32226

Enclosed is a letter that amends Permit Number PSD-FL-010(B). This letter amends the specific conditions related to sulfur dioxide (SO₂) emissions and fuel use in the subject Final Determination (dated March 12, 1982) pursuant to 40 CFR 52.21-Prevention of Significant Deterioration (PSD permit). This permit amendment is issued pursuant to Section 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 14 (fourteen) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.


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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT AMENDMENT (including the FINAL permit amendment) was sent by certified mail (*) and copies were mailed by U.S. mail before the close of business on 10-14-96 to the person(s) listed:

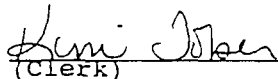
Mr. Richard Breitmoser*

Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Hamilton Oven, DEP
Mr. Chris Kirts, NED
Mr. Jim Manning, RESD
Mr. Ken Kosky, MKBN

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


(Clerk) 10-14-96
(Date)



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 11, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Breitmoser, P.E.
Vice President
Environmental Health and Safety Group
St. Johns River Power Park
11201 New Berlin Road
Jacksonville, Florida 32226

Dear Mr. Breitmoser:

Re: Permit Amendment - Petroleum Coke Cofiring
Jacksonville Electric Authority, St. Johns River Power Park
PSD-FL-010(B); Duval County

The Department hereby amends the specific conditions related to sulfur dioxide (SO₂) emissions and fuel use in the subject Final Determination (dated March 12, 1982) pursuant to 40 CFR 52.21 - Prevention of Significant Deterioration (PSD Permit). The PSD Permit, previously amended on March 30, 1995 is amended as follows:

Condition 2.A. (new)

- i. When blends of petroleum coke and coal with a sulfur content of up to or equal to 2 percent are fired in Units 1 or 2, the SO₂ emissions shall not exceed 0.55 pound per million British thermal units (lb/MMBtu) and a minimum of 76 percent reduction shall be achieved in the flue gas desulfurization system.
- ii. When co-firing petroleum coke with coals having a sulfur content between 2.00 and 3.63 percent, the emission limitation shall be based on the following formula:

$$\text{SO}_2 \text{ emission limit (lb/MMBtu)} = (0.2 \times C/100) + 4$$

where: C = percent of coal co-fired on a heat input basis.

Please note that C is on a heat input basis and not weight input basis, so appropriate conversions should be used.

Mr. Richard Breitmoser
October 11, 1996
Page Two

iii. When coals with a sulfur content greater than 3.63 percent are co-fired with petroleum coke, the SO₂ emissions shall not exceed the following formula:

$$\text{SO}_2 \text{ (lb/MMBtu)} = (0.1653 \times C \times S - 0.4 \times [C + 40]) \times 1/100$$

where: C = percent of coal co-fired on a heat input basis
S = weight percent sulfur in the coal

iv. The maximum SO₂ emission rate when firing petroleum coke and coal shall not exceed 0.676 lb/MMBtu.

v. Compliance with the SO₂ emissions limit shall be based on a 30-day rolling average for those days when petroleum coke is fired. Any use of petroleum coke during a 24-hour period shall be considered 1 day of the 30-day rolling average. The 30-day rolling average shall be calculated according to the New Source Performance Standards (NSPS) codified in 40 CFR 60 Subpart Da, except as noted above.

Condition 2.B. (new)

The petroleum coke-coal blends shall be limited to a maximum of 20 percent petroleum coke, by weight. The maximum weight of the petroleum coke burned shall not exceed 100,000 lb/hr. The maximum sulfur content of the petroleum coke-coal blend shall not exceed 4.00 percent, by weight.

Condition 3. A. (new)

The applicant shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially co-fired with petroleum coke, information demonstrating in accordance with 40 CFR 52.21(b)(21)(v) and 40 CFR 52.21(b)(33) that the operational changes did not result in emissions increases of nitrogen oxides and particulate matter.

Condition 3. B. (new)

The applicant shall maintain and submit to the Department on a semiannual basis for a period of two years from the date the unit is initially co-fired with petroleum coke, and then on an annual basis (if the first two years of data show no significant increase in carbon monoxide emissions) for an additional three years, information demonstrating that the operational changes did not

Mr. Richard Breitmoser
October 11, 1996
Page Three

result in a significant emissions increase of carbon monoxide. The carbon monoxide emissions shall be based on test results using EPA Method 10. Additionally, quarterly continuous emission monitoring data for carbon monoxide emissions shall be submitted to the Department for a period of two years to show the range of emissions experienced during each quarter.

Condition 3. C. (new)

The applicant shall maintain and submit to the Department on a semiannual basis for a period of two years from the date the unit is initially co-fired with petroleum coke, information demonstrating that the operational changes did not result in significant emissions increases of sulfuric acid mist. The sulfuric acid mist emissions shall be based on test results using EPA Method 8.

A copy of this amendment letter shall be attached to and shall become a part of Permit PSD-FL-010.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division Air Resources Management

CERTIFIED MAIL

EV 960328

April 4, 1996

Mr. Al Linero
Bureau of Air Regulation
Florida Dept. of Environmental Protection
2600 Blair Stone Road
Mail Station 5505
Tallahassee, FL 32399-2400



BUREAU OF
AIR REGULATION

APR 05 1996

RECEIVED

RE: Jacksonville Electric Authority (JEA)
St. Johns River Power Park (SJRPP), Units 1 & 2
Permit File No. PSD-FL-010, PA 81-13
Petroleum Coke

Dear Mr. Linero:

We are in receipt of your March 25, 1996 letter requesting additional information in order to continue your processing of the petroleum coke application submitted to your agency on March 01, 1996. The application was submitted to amend the above referenced permit and to allow burning of up to 20 percent petroleum coke with coal in SJRPP Units 1 & 2.

The following is the listing of the requested information with responses:

1. The test burn of the petroleum coke-coal blends were limited to 20 percent petroleum coke, by weight. The application requests 20 percent of petroleum coke on heat input basis. Please provide the relationship between percent petroleum coke by weight and percent petroleum coke by heat.

Response: We appreciate your pointing out the conflict on heat rate versus weight percent for establishing the petroleum coke to coal ratios. SJRPP proposes to determine petroleum coke input as a percentage of weight rather than heat input. It is noted that formulas for emission rates are based on heat input so no formulas in our submittal will change. Due to the heating value difference between petroleum coke and coal, a 20 percent by weight for petroleum coke is equivalent to 23.4 percent by heat input. For this reason emission rates will decrease slightly from our original submittal and scrubbing percentage will increase. This decrease in emission rate is due to the fact that we must maintain an emission rate of 0.4 lb/mmBtu for the petroleum coke portion and that 95 percent scrubbing is now required for 23.4 percent of the heat input as opposed to 20 percent. For example, when co-firing petroleum coke with coals having sulfur contents of 2 percent or less, the revised emission limit is 0.55 lb/mmBtu and a minimum 76 percent reduction based on 20 percent petroleum coke by weight. In contrast, based on 20 percent heat input, the proposed emission limit was 0.56 lb/mmBtu and a 75 percent reduction. We

have amended the applicable pages and tables of our application to reflect this change to weight percent. (See Attachment 1R)

2. The application states that a temporary hopper and conveyor will be used to load petroleum coke with coal on the reclaim conveyor prior to transporting the mixture to the crusher house and then to the coal storage silos. What assurances are provided to the Department that a maximum of 20 percent mix by heat of petroleum coke with coal is taking place once the blended fuel is sent to the coal storage silo.

Response: Since we propose to change to weight percent for blending purposes, determining the percent of the blend will be straight forward. The petroleum coke will be fed onto the reclaim conveyor via the temporary hopper and conveyor. The petroleum coke will be blended, by weight, with coal at the transfer "crusher building" in the surge bin. The tonnage of petroleum coke to establish the percentage (up to 20%) will be determined based on the feeder rate. The petroleum coke will be weighed by belt scale to establish the feeder rate. The coal is fed to the transfer "crusher building" surge bin via a separate belt. The tonnage of coal will be determined based on the feeder rate. The coal will be weighed by belt scale to establish the feeder rate. Records will be kept on hourly petroleum coke and coal feed rates as well as belt scale calibrations. These records will be maintained on site.

3. Will the sulfur content of the petroleum coke or the blend ever exceed 4 percent, by weight?

Response: Although the sulfur content of the petroleum coke may exceed 4 percent, SJRPP proposes that the sulfur content of the petroleum coke and coal blend shall not exceed 4 percent by weight to maintain consistency with the existing above referenced permits. (See pages 25, 26, 27, & 28 of the Application)

4. Please describe the procedures that can be implemented by the facility for an inspector to determine if the facility is in compliance with the different scenarios for SO₂ removal efficiency. Describe how the proposed conditions for SO₂ are enforceable as a practical matter.

Response: SJRPP proposes to demonstrate compliance in the same manner as currently required by 40 CFR 60 subpart Da, (i.e. 30 day rolling average method). As referenced in Attachment 1 Section 2.1 Item 6 of the application, SJRPP Units 1 & 2 feature an inlet continuous emission monitoring system (CEMS) to monitor inlet SO₂ levels prior to the flue gas desulfurization system (FGDS) as required by 40 CFR Subpart Da and an outlet CEMS which records SO₂ emissions as required by Subpart Da and 40 CFR Part 75. These SO₂ data are quality assured pursuant to Subpart Da and Part 75 requirements. The percent reduction requirements and the SO₂ emissions limitations for coals blended with petroleum coke shall be ensured by operating in accordance with the data from the inlet and outlet CEMS. The sulfur content of the coal shall be ensured by utilizing the "as received" coal analytical data or on-site sampling and analysis.

FGDS unit operators monitor the real-time percent reductions and SO₂ lb/MMBtu values from the quality assured inlet and outlet SO₂ analyzers. The unit operators shall adjust removal efficiency based on these real-time inlet and outlet SO₂ values as dictated by the coal's representative sulfur content

Please refer to Attachment 1, Section 2.1 a and b of the Application. Based on the coal's representative sulfur content, the FGDS unit operator shall adjust the real-time removal efficiency to ensure the combined emission limit based on Table 2 of the Application which will be available to the FGDS unit operator.

The above mentioned data will be available for inspectors on site. In addition quarterly CEMs submittals are made to the Department as part of our Title IV reporting requirements.

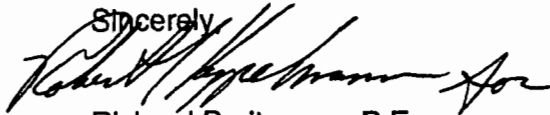
5. Please quantify the CO emissions in ppm, lb/hr and TPY for the past two years for the two units. Provide a range of CO emissions based on the historical data. How will you assure the Department that this range and the total annual emissions for the past two years are not exceeded when burning a blend of petroleum coke and coal?

Response: CO emissions from the SJRPP units vary greatly depending on the coal type and specific unit operating parameters. It should be noted that unlike many coal plants SJRPP burns a great variety of coals which results in a significant variability in CO emissions. 1995 data from non-certified CO-monitors indicate that daily maximum hourly CO values ranged from less than 10 ppm to 511 ppm for Unit 1 and less than 10 ppm to 484 ppm for Unit 2. It is noted that we did not optimize combustion parameters during our petroleum coke test burn and we expect a significant decrease in CO emissions during future petroleum coke burns. We are confident that these emissions will be well within the above mentioned ranges.

Currently, we do not feel that there is sufficient credible data to develop a meaningful TPY CO number for our units. It is noted, however, that 511 ppm corresponds to approximately to 3194 lb/hr. This CO issue is further addressed on page 6 of attachment one of our application.

Please contact Jay Worley at (904) 751-7729 if you have any additional questions. We appreciated your efforts to expedite the approval of this project.

Sincerely



Richard Breitmoser, P.E.
Vice President
Environmental Health & Safety Group

/pja

cc: Hamilton S. Oven, Siting Coordinator, DEP
Jay Worley, SJRPP

bcc: S. Serian w/o attachments
J. Jackson "
P. Smith "
A. Cobb "
L. Bradley "
B. Kappelmann "
C. Maire "
B. Para "
J. Alves, (HGSS) w/attachments
K. Koskey (KBN) "
S. Arif "
File "

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Coal and Petroleum Coke (Weight Basis)	
2. Source Classification Code (SCC): 1-01-001-04	
3. SCC Units: Tons	
4. Maximum Hourly Rate: 243	5. Maximum Annual Rate: 2,129,013
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 4	8. Maximum Percent Ash: 18
9. Million Btu per SCC Unit: 25	
10. Segment Comment: Maximum hourly and annual rate based on maximum percentage of petroleum coke when co-firing (i.e., 20% weight). Heat content and sulfur content of petroleum coke based on typical values of 29.6 MMBtu/ton and 6% sulfur. (See Segment 1 of 2 for coal values). Maximum Percent Ash: <18. Million Btu per SCC Unit: 25.3.	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted: SO2	
2. Total Percent Efficiency of Control:	95 %
3. Primary Control Device Code:	067
4. Secondary Control Device Code:	
5. Potential Emissions:	575.5 lbs/hr 2,521 tons/yr
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions:	
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr	
8. Emission Factor:	0.4 lb/MMBtu
Reference: See Comment	
9. Emissions Method Code (check one):	
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
10. Calculation of Emissions:	
6,144 MMBtu/hr x 0.234 % heat input (Pet Coke) x 0.4 lb/MMBtu = 575.5 lb/hr	
11. Pollutant Potential/Estimated Emissions Comment:	
Emission Factor Reference: Proposed Emission Limit for Petroleum Coke only. Potential emissions for petroleum coke only and based on assuring no increase in 'actual emissions' based on the definition in 62-212.200 (See Attachment 1).	

Emissions Unit Information Section 1 of 2
Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: RULE		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 0.4 lb/MMBtu		
4. Equivalent Allowable Emissions:	575.5 lbs/hr	2,521 tons/yr
5. Method of Compliance: CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Proposed emission limit for petroleum coke only. See Attachment 1R.		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Coal and Petroleum Coke (Weight Basis)	
2. Source Classification Code (SCC): 1-01-001-04	
3. SCC Units: Tons	
4. Maximum Hourly Rate: 243	5. Maximum Annual Rate: 2,129,013
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 4	8. Maximum Percent Ash: 18
9. Million Btu per SCC Unit: 25	
10. Segment Comment: Maximum hourly and annual rate based on maximum percentage of petroleum coke when co-firing (i.e., 20% weight). Heat content and sulfur content of petroleum coke based on typical values of 29.6 MMBtu/ton and 6% sulfur. (See Segment 1 of 2 for coal values). Maximum Percent Ash: <18. Million Btu per SCC Unit: 25.3.	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted: SO2		
2. Total Percent Efficiency of Control:	95	%
3. Primary Control Device Code:	067	
4. Secondary Control Device Code:		
5. Potential Emissions:	575.5 lbs/hr	2,521 tons/yr
6. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr	
8. Emission Factor:	0.4 lb/MMBtu	
Reference:	See Comment	
9. Emissions Method Code (check one):	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
10. Calculation of Emissions:	6,144 MMBtu/hr x 0.234 % heat input (Pet Coke) x 0.4 lb/MMBtu = 575.5 lb/hr	
11. Pollutant Potential/Estimated Emissions Comment:	Emission Factor Reference: Proposed Emission Limit for Petroleum Coke only. Potential emissions for petroleum coke only and based on assuring no increase in 'actual emissions' based on the definition in 62-212.200 (See Attachment 1).	

Emissions Unit Information Section 2 of 2
Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: RULE		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 0.4 lb/MMBtu		
4. Equivalent Allowable Emissions:	575.5 lbs/hr	2,521 tons/yr
5. Method of Compliance: CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Proposed emission limit for petroleum coke only. See Attachment 1R.		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

ATTACHMENT 1R

ATTACHMENT 1

1.0 PROJECT DESCRIPTION

The St. Johns River Power Park (SJRPP) proposes to co-fire a mixture of up to 20 percent petroleum coke ~~by weight~~ with coal in a manner that would ensure that there is not a significant net increase in actual emissions of any regulated pollutant and, therefore, the Prevention of Significant Deterioration (PSD) Rules in 62-212.400, Florida Administrative Code (F.A.C.) would not apply. This would be accomplished through a limitation on sulfur dioxide (SO₂) emissions when co-firing petroleum coke that includes both an emission limit and a percent SO₂ reduction requirement. In addition, SJRPP proposes to accept a condition for carbon monoxide (CO) that would demonstrate that an net significant emission increase would not occur.

This permit application is associated with a modification request of the site certification for the units (PA 81-13). Approval from the FDEP is being sought to use up to 20 percent (~~weight~~ basis) of petroleum coke with coal. No new facilities or equipment are required to burn petroleum coke. Minor amendments to PSD permit are required. There will be no substantial changes made in the fuel handling facilities or the emission units to accommodate co-firing of petroleum coke. A temporary hopper and conveyor will be used to load petroleum coke with coal on the reclaim conveyor prior to transporting to the crusher house. From the crusher house, the blended fuel will be conveyed to the coal storage silos. Petroleum coke can be co-fired with coal as soon as approval is obtained from FDEP and it is received in the coal yard.

2.0 TRIAL BURN TEST RESULTS

A trial test burn for co-firing petroleum coke and coal was authorized by the Florida Department of Environmental Protection (FDEP) and conducted August 8-19, 1995. A copy of the trial test burn results is attached. A summary of the trial test burn results and a statistical comparison of the baseline tests (coal only) and co-firing petroleum coke and coal are presented in Table 1. A statistical analysis was performed using Appendix C to Part 60 (of 40 CFR).

The results of the trial test burn and the statistical analysis indicate that there are no emission rate increases for particulate matter or nitrogen oxides. The emission rates of sulfur dioxide, sulfuric acid mist, and CO were lower in the baseline tests than in the tests performed while the unit was co-firing petroleum coke and coal. The remainder of this attachment discusses these pollutants.

2.1 SULFUR DIOXIDE

A federally enforceable permit condition is proposed that prevents PSD applicability by preventing actual SO₂ emissions associated with the petroleum coke fraction of the blended fuel from exceeding past actual SO₂ emissions associated with burning coal. In this manner, there will be no prospective increase in SO₂ emissions caused by the proposed change (i.e., utilization of petroleum coke). Pursuant to EPA's June 21, 1992, WEPCO regulations (57 Federal Register 32314), increases in air emissions not caused by proposed changes must be excluded from steam electric power plants' future actual emissions in assessing PSD applicability. EPA emphasized in the preamble statement that new source review "applies only where the emissions increase is cause by the change" [57 Federal Register 32325]. The approach comports with the WEPCO regulations and corresponding state rules by eliminating the possibility that the petroleum coke portion of prospective fuel blends will exceed "past actual" SO₂ emissions associated with coal burning. Consistent with the WEPCO regulations, future increases in SO₂ emissions caused solely by enhanced electricity demand or caused by permissible variations in coal sulfur content should not count toward PSD applicability.

The emission limitation has the following components:

- a. When blends of petroleum coke and coal with a sulfur content of up to or equal to 2 percent are fired in Units 1 or 2, the SO₂ emissions shall not exceed 0.55 pound per million British thermal units (lb/MMBtu) and a minimum of 76 percent reduction in the flue gas desulfurization system.
- b. When co-firing petroleum coke with coals having a sulfur content between 2 and 3.63 percent, the emission limitation shall be based on the following formula:

$$\text{SO}_2 \text{ emission limit (lb/MMBtu)} = (0.2 \times C/100) + 0.4$$

where: C = percent of coal co-fired on a heat input basis.

- c. When coals with a sulfur content greater than 3.63 percent are co-fired with petroleum coke, the SO₂ emissions shall not exceed the following formula:

$$\text{SO}_2 \text{ emission limit (lb/MMBtu)} = (0.1653 \times C \times S - 0.4 \times C + 40) \times 1/100$$

where: C = percent of coal co-fired on a heat input basis

- d. The maximum SO₂ emission rate when firing petroleum coke shall not exceed 0.676 lb/MMBtu.
- e. Compliance with the SO₂ emissions limit shall be based on a 30-day rolling average for those days when petroleum coke is fired. Any use of petroleum coke during a 24-hour period shall be considered 1 day of the 30-day rolling average. The 30-day rolling average shall be calculated according to the New Source Performance Standards (NSPS) codified in 40 CFR Part 60 Subpart Da, except as noted above.

The proposed emission limits for SO₂ were developed from the two fundamental requirements of the PSD approval and the specific conditions of the site certification and to assure no net increase in annual emissions. The PSD approval and site certification require that the NSPS Subpart Da be met and that emissions do not exceed 0.76 lb/MMBtu (30-day rolling average). The emission limits proposed for co-firing are supported by the following rationale:

1. The NSPS codified in 40 CFR Part 60 Subpart Da requires, in the range of coals to be fired, either 0.6 lb/MMBtu or a 70 percent reduction in the potential SO₂ combustion concentration. For coals with a sulfur content greater than 1.2 percent, the 0.6 lb/MMBtu emission limit would govern. For coals with sulfur contents of 1.2 percent or less, the 70 percent reduction requirement would govern. This is illustrated in the attached Table 2 which presents in the sixth and seventh columns the NSPS emission limit and the percent SO₂ removals as a function of the coal sulfur content (first column). In terms of practical application, under Subpart Da: (1) when the inlet air to the scrubber has SO₂ concentrations under 2.0 lb/MMBtu, 70 percent SO₂ reduction is required; (2) when the inlet SO₂ concentration is higher than 2.0 but less than 6.0 lb/MMBtu, required SO₂ scrubbing must result in emissions of 0.6 lb/MMBtu or less; (3) at higher concentrations, 90 percent removal is required. It should be noted that the facility has a 0.76 lb SO₂/MMBtu emission limit established as BACT for coal firing. The proposed emission limit for co-firing petroleum coke and coal could not exceed this limit, since this is inherent in the proposed limit.
2. The representative actual annual SO₂ emission rate for Units 1 and 2 over the last 2 years has been 0.4 lb/MMBtu. By ensuring that the emission rate when firing petroleum coke does not exceed 0.4 lb/MMBtu, the "representative actual annual emissions" as defined in 40 CFR 52.21(b)(33) would not exceed the past actual

emissions. To achieve a 0.4 lb/MMBtu emission rate with the typical sulfur content for petroleum coke (e.g., 6 percent), a 95 percent reduction is required. This is shown on the last column of the Table 2.

3. Except for coals with a sulfur content of greater than 2 percent, the proposed percent reduction requirement and the emission limit are based on co-firing 20 percent petroleum coke with coal (on a ~~weight~~ basis). This is the worst-case mixture proposed and ensures that when co-firing lower percentages of petroleum coke with coal, the resulting emission rate would be lower than could be allowed by meeting only the NSPS and the "actual" emission rate. For example, if a 10 percent mixture of petroleum coke is co-fired with a 1.2 percent sulfur coal, then the resulting emissions rate to meet NSPS and 0.4 lb/MMBtu would be 0.58 lb/MMBtu. In contrast, the proposed condition would limit the SO₂ emissions to ~~0.55~~ lb/MMBtu.
4. The effect of the proposed SO₂ emission limitation is shown on Table 2 (second and third columns). As shown, for coals with sulfur content less than 1.2 percent, the ~~76~~ percent reduction requirement would produce emission rates less than ~~0.55~~ lb/MMBtu while meeting the NSPS reduction requirement of 70 percent and the "actual" emission rate of 0.4 lb/MMBtu for petroleum coke. For coals with a sulfur content of 1.2 to 2 percent, the proposed emission limit of 0.56 lb/MMBtu would meet the NSPS limit of 0.6 lb/MMBtu for coal and 0.4 lb/MMBtu for petroleum coke.
5. The equation for an SO₂ emission limit for coals above 2 percent sulfur content would allow some flexibility for petroleum coke/coal mixtures. This formula would be applicable for sulfur contents from 2.0 to 3.63 percent, since coals in this range would be required to meet the 0.6 lb/MMBtu limit in Subpart Da. The proposed equations for SO₂ emission limitations for coal above 2 percent sulfur content would allow some flexibility for petroleum coke/coal mixtures (see Table 3 for derivation of equations). The equation in Paragraph b above will **achieve** compliance with the governing Subpart Da limit of 0.6 lb/MMBtu and 0.4 lb/MMBtu for petroleum coke. The equation in Paragraph c above accounts for the governing Subpart Da requirement of 90 percent SO₂ reduction and 0.4 lb/MMBtu for petroleum coke. The maximum SO₂ emission rate associated with firing only coal, regardless of coal sulfur content, cannot exceed 0.76 lb/MMBtu as required by PSD and Power Plant Siting

Act (PPSA) approval. Therefore, mixtures of petroleum coke and coal can never exceed 0.676 lb/MMBtu.

6. SJRPP Units 1 and 2 feature an inlet continuous emission monitoring system to monitor inlet SO₂ levels prior to the flue gas desulfurization system as required by Subpart Da and an outlet continuous emission monitoring system which records SO₂ emissions as required by Subpart Da and 40 CFR Part 75. These SO₂ data are quality assured pursuant to Subpart Da and Part 75 requirements. The percent reduction requirements and the SO₂ emissions limitations for coals blended with petroleum coke that have a sulfur content less than 3.63 percent shall be ensured by operating in accordance with the data from the inlet and outlet continuous emissions monitoring system. The sulfur content of the coal shall be ensured by utilizing the "as received" coal analytical data or onsite sampling and analysis.

The proposed emission limitation meets the letter and intent of the WEPCO regulations. Also, this condition comports with EPA's "federal enforceability" guidance because it is enforceable both as a matter of law and as a practical matter; simply put, this condition obviates the possibility of an increase in actual emissions attributable to petroleum coke. Moreover, this proposal comports with good environmental policy. As shown in Figures 1 and 2, under the proposed permit condition, co-firing petroleum coke will be subject to lower emissions limitations than the limitations applicable when utilizing only coal. These graphs compare the emission limits and reduction percentages currently applicable to coal firing and proposed for petroleum coke co-firing. With the proposed permit condition, co-firing petroleum coke will not require PSD analysis pursuant to Rules 62-212.400 and 62.212.200(2)(d), F.A.C.

2.2 SULFURIC ACID MIST

The trial test values for sulfuric acid mist were a direct result of an associated increase in SO₂ emissions. Table 4 presents a comparison of the SO₂ and SO₃ emissions between the baseline tests and the co-firing test. The ratios of the blend to baseline test results are 1.78 and 1.70 for SO₂ and SO₃ emissions, respectively. This indicates that the SO₃ increase was in the relatively same proportion for both SO₃ and SO₂ (actually slightly greater for SO₂). In addition, the amount of SO₂ removal for both the baseline test and blend test was almost identical at about 73 percent.

The proposed SO₂ emission limit, if implemented during the test burn, would have ensured lower SO₂ emissions and concomitantly lower SO₃ emissions that would ensure no significant increase in the emission rates for both pollutants. Overall reduction in SO₂ emissions would have likely been 20 to 30 percent higher. For these reasons, no condition for sulfuric acid mist should be required.

2.3 CARBON MONOXIDE

The CO emissions during the baseline tests were lower than those observed during the blend tests. Since there was no attempt to control CO emissions during the co-firing tests, the combustion conditions were not "fine tuned" to optimize combustion of the petroleum coke and coal blend. Many factors, such as the grindability of the petroleum coke/coal blend and combustion controls (e.g., oxygen concentrations, NO_x control systems, load, etc.) can significantly influence CO concentrations. Data from other petroleum coke/coal co-firing test burns indicate no changes in CO emission rates. In addition, a review of the last several months of CO data from the SJRPP indicates CO values in the range reported for the co-firing test burn. For these reasons, SJRPP proposes to optimize combustion of co-firing petroleum coke and coal to ensure no net increase in emissions. A condition is proposed that has been issued in other Department permits approving co-firing of petroleum coke and coal:

- (a) The applicant shall maintain and submit to the Department on an annual basis for a period of 5 years from the date the unit is co-fired with petroleum coke, information demonstrating that the co-firing did not result in significant emission increases of CO. The CO emissions shall be based on test results using EPA Method 10.

Table 1. Statistical Analysis of Petroleum Coke Trial Burn, St. John's River Power Park

Test Case	Date	PM (lb/hr)	SO3 (ppm)	CO (ppm)	NOx out (lb/MMBtu)	SO2 in (lb/MMBtu)	SO2 out (lb/MMBtu)
Baseline	07/18/95	44.14	6.96	10.29	0.468	1.029	0.283
Baseline	07/19/95	21.50	5.19	45.16	0.502	1.026	0.282
Baseline	07/20/95	64.92	5.55	67.00	0.474	1.031	0.282
Baseline	08/08/95	61.85	7.04	21.15	0.549	0.973	0.270
	Average	48.1	6.19	35.9	0.498	1.015	0.279
	Std. Dev.	20.0	0.95	25.3	0.0369	0.0279	0.0062
	Sample Var	398.4	0.91	642.1	0.0014	0.0008	0.0000
	n	4	4	4	4	4	4
Blend	08/11/95		7.54	312.96	0.502	1.636	0.457
Blend	08/12/95		9.21	497.58	0.494	1.709	0.485
Blend	08/13/95		14.03	745.64	0.463	1.728	0.482
Blend	08/14/95	80.76			0.498	1.757	0.477
Blend	08/15/95	42.95			0.503	1.730	0.471
Blend	08/16/95	28.98			0.535	1.720	0.477
Blend	08/17/95	63.28			0.559	1.938	0.521
Blend	08/18/95		11.37	467.90	0.498	2.244	0.566
Blend	08/19/95	23.47			0.470	2.376	0.545
	Average	47.9	10.54	506.0	0.502	1.871	0.498
	Std. Dev.	24.0	2.81	179.1	0.030	0.264	0.037
	Sample Var	573.9	7.88	32071.4	0.001	0.070	0.001
	n	5	4	4	9	9	9
Degrees of Freedom		7	6	6	11	11	11
t prime at 95%		1.895	1.943	1.943	1.796	1.796	1.796
Sp		22.33	2.10	127.89	0.032	0.225	0.032
t calc		-0.0143188	2.937	5.198	0.220	6.322	11.406
Result		OK	Sig Diff	Sig Diff	OK	Sig Diff	Sig Diff

Table 2. Combined Emissions Limit and Scrubber Efficiency for Co-firing Petroleum Coke and Coal at St. Johns River Power Park (Revised)

Coal Sulfur Content	Combined Emission Limit (lb/mmBtu)	Minimum Combined Scrubber Efficiency	Uncontrolled Emissions		Coal SO2 NSPS Limit (lb/mmBtu)	Coal SO2 Removal (lb/mmBtu)	Pet Coke SO2 Removal (lb/mmBtu)
			Coal SO2 (lb/mmBtu)	Pet Coke SO2 (lb/mmBtu)			
0.80%	0.40	75.87%	1.32	8.11	0.40	70.00%	95.07%
0.90%	0.44	75.87%	1.49	8.11	0.45	70.00%	95.07%
1.00%	0.47	75.87%	1.65	8.11	0.50	70.00%	95.07%
1.10%	0.51	75.87%	1.82	8.11	0.55	70.00%	95.07%
1.20%	0.55	75.87%	1.98	8.11	0.60	70.00%	95.07%
1.30%	0.55	77.46%	2.15	8.11	0.60	72.08%	95.07%
1.40%	0.55	78.99%	2.31	8.11	0.60	74.07%	95.07%
1.50%	0.55	80.31%	2.48	8.11	0.60	75.80%	95.07%
1.60%	0.55	81.47%	2.64	8.11	0.60	77.31%	95.07%
1.70%	0.55	82.49%	2.81	8.11	0.60	78.65%	95.07%
1.80%	0.55	83.40%	2.98	8.11	0.60	79.83%	95.07%
1.90%	0.55	84.21%	3.14	8.11	0.60	80.89%	95.07%
2.00%	0.55	84.95%	3.31	8.11	0.60	81.85%	95.07%
2.10%	0.55	85.61%	3.47	8.11	0.60	82.71%	95.07%
2.20%	0.55	86.21%	3.64	8.11	0.60	83.50%	95.07%
2.30%	0.55	86.76%	3.80	8.11	0.60	84.22%	95.07%
2.40%	0.55	87.26%	3.97	8.11	0.60	84.88%	95.07%
2.50%	0.55	87.72%	4.13	8.11	0.60	85.48%	95.07%
2.60%	0.55	88.15%	4.30	8.11	0.60	86.04%	95.07%
2.70%	0.55	88.55%	4.46	8.11	0.60	86.56%	95.07%
2.80%	0.55	88.92%	4.63	8.11	0.60	87.04%	95.07%
2.90%	0.55	89.26%	4.79	8.11	0.60	87.48%	95.07%
3.00%	0.55	89.58%	4.96	8.11	0.60	87.90%	95.07%
3.10%	0.55	89.88%	5.12	8.11	0.60	88.29%	95.07%
3.20%	0.55	90.16%	5.29	8.11	0.60	88.66%	95.07%
3.30%	0.55	90.42%	5.45	8.11	0.60	89.00%	95.07%
3.40%	0.55	90.67%	5.62	8.11	0.60	89.32%	95.07%
3.50%	0.55	90.90%	5.79	8.11	0.60	89.63%	95.07%
3.60%	0.55	91.12%	5.95	8.11	0.60	89.92%	95.07%
3.63%	0.55	91.19%	6.00	8.11	0.60	90.00%	95.07%
3.70%	0.56	91.19%	6.12	8.11	0.61	90.00%	95.07%
3.80%	0.57	91.19%	6.28	8.11	0.63	90.00%	95.07%
3.90%	0.59	91.19%	6.45	8.11	0.64	90.00%	95.07%
4.00%	0.60	91.19%	6.61	8.11	0.66	90.00%	95.07%

Assumptions: 12,100 Btu/lb for Coal
14,800 Btu/lb for Petroleum Coke
6% sulfur content of Petroleum Coke
20% Petroleum Coke firing (Weight basis)
0.40 lb/mmBtu for Petroleum Coke

Table 3. Derivation of Formulas (Page 1 of 2)

Fundamental Requirements:

1. Coal - Meet NSPS Subpart Da and BACT Emission Limit
 - a. 0.6 lb / MMBtu or 70% SO₂ Reduction (NSPS),
 - b. 1.2 lb / MMBtu or 90% SO₂ Reduction (NSPS), and
 - c. 0.76 lb / MMBtu (30-day rolling average).

2. Petroleum Coke - Meet 0.4 lb / MMBtu; Equivalent to 95% Reduction

$$\begin{aligned} \text{Calculation: } & \frac{0.06 \text{ lb S}}{\text{lb fuel}} \times \frac{\text{lb fuel}}{14,800 \text{ Btu}} \times \frac{2 \text{ lb SO}_2}{\text{lb S}} \times \frac{10^6}{\text{MM}} \times (1 - 0.95) \\ & = 0.4 \text{ lb / MMBtu} \end{aligned}$$

Proposed Limits:

1. Coals - ≤2% Sulfur; Assume 20% (by weight) Petroleum Coke Co-Firing at All Times

- a. NSPS = 0.6 lb / MMBtu

$$\begin{aligned} \text{Calculation: } & \frac{0.0121 \text{ lb S}}{\text{lb fuel}} \times \frac{\text{lb fuel}}{12,100 \text{ Btu}} \times \frac{2 \text{ lb SO}_2}{\text{lb S}} \times \frac{10^6}{\text{MM}} \times (1 - 0.7) \\ & = 0.6 \text{ lb / MMBtu} \end{aligned}$$

- b. Petroleum Coke = 0.4 lb / MMBtu

$$\begin{aligned} \text{c. Coal Heat Input} & = 0.8 \times 12,100 \text{ Btu / lb} = 9,680 \text{ Btu / lb-fuel (76.6\%)} \\ \text{Petroleum Coke Heat Input} & = 0.2 \times 14,800 \text{ Btu / lb} = 2,960 \text{ Btu / lb-fuel (23.4\%)} \\ & \qquad \qquad \qquad 12,640 \text{ Btu / lb-fuel (100\%)} \end{aligned}$$

$$\begin{aligned} \text{d. Result: } & \left(\frac{76.6}{100} \times 0.6 \text{ lb / MMBtu} \right) + \left(\frac{23.4}{100} \times 0.4 \text{ lb / MMBtu} \right) \\ & = 0.55 \text{ lb / MMBtu and 76\% reduction} \end{aligned}$$

2. Coals >2% Sulfur and ≤ 3.63% Sulfur; Variable Amount of Petroleum Coke

- a. NSPS = 0.6 lb / MMBtu

$$\begin{aligned} \text{Calculation: } & \frac{3.63 \text{ lb S}}{100 \text{ lb fuel}} \times \frac{\text{lb fuel}}{12,100 \text{ Btu}} \times \frac{2 \text{ lb SO}_2}{\text{lb S}} \times \left(1 - \frac{90}{100} \right) \\ & = 0.6 \text{ lb / MMBtu} \end{aligned}$$

- b. Petroleum Coke = 0.4 lb / MMBtu

Table 3. Derivation of Formulas (Page 2 of 2)

Proposed Limits, continued:

- c. Let C = % Coal Fired (
- Btu basis*
-)

$$\text{Equation: } \left(\frac{C}{100} \times 0.6 \text{ lb / MMBtu} \right) + \left[\left(1 - \frac{C}{100} \right) \times 0.4 \text{ lb / MMBtu} \right]$$

$$\text{SO}_2 \text{ Limit} = \frac{0.6C}{100} - \frac{0.4C}{100} + 0.4 = \frac{0.2C}{100} + 0.4$$

3. Coals > 3.63% Sulfur; Variable Amount of Petroleum Coke

- NSPS = 90% Reduction
- Petroleum Coke = 0.4 lb / MMBtu
- Let C = % Coal Fired (*Btu basis*) and S = % Sulfur in Coal

$$\text{Equation: } \left[\frac{C}{100} \times \frac{S}{100} \times \frac{1}{12,100} \times 2 \times \left(1 - \frac{90}{100} \right) \times 10^6 \right]$$

$$+ \left[\left(1 - \frac{C}{100} \right) \times 0.4 \right]$$

$$= \left(\frac{C}{100} \times S \times 0.1653 \right) + \left(0.4 - 0.4 \times \frac{C}{100} \right)$$

$$\text{SO}_2 \text{ Limit} = \frac{1}{100} \times (0.1653 \times C \times S - 0.4C + 40)$$

Example: 80% Coal (*Btu basis*) and 3.8% Sulfur

$$(0.1653 \times 80 \times 3.8 - 0.4 \times 80 + 40) \times \frac{1}{100} = 0.58 \text{ lb / MMBtu}$$

4. Maximum Limit When Co-Firing

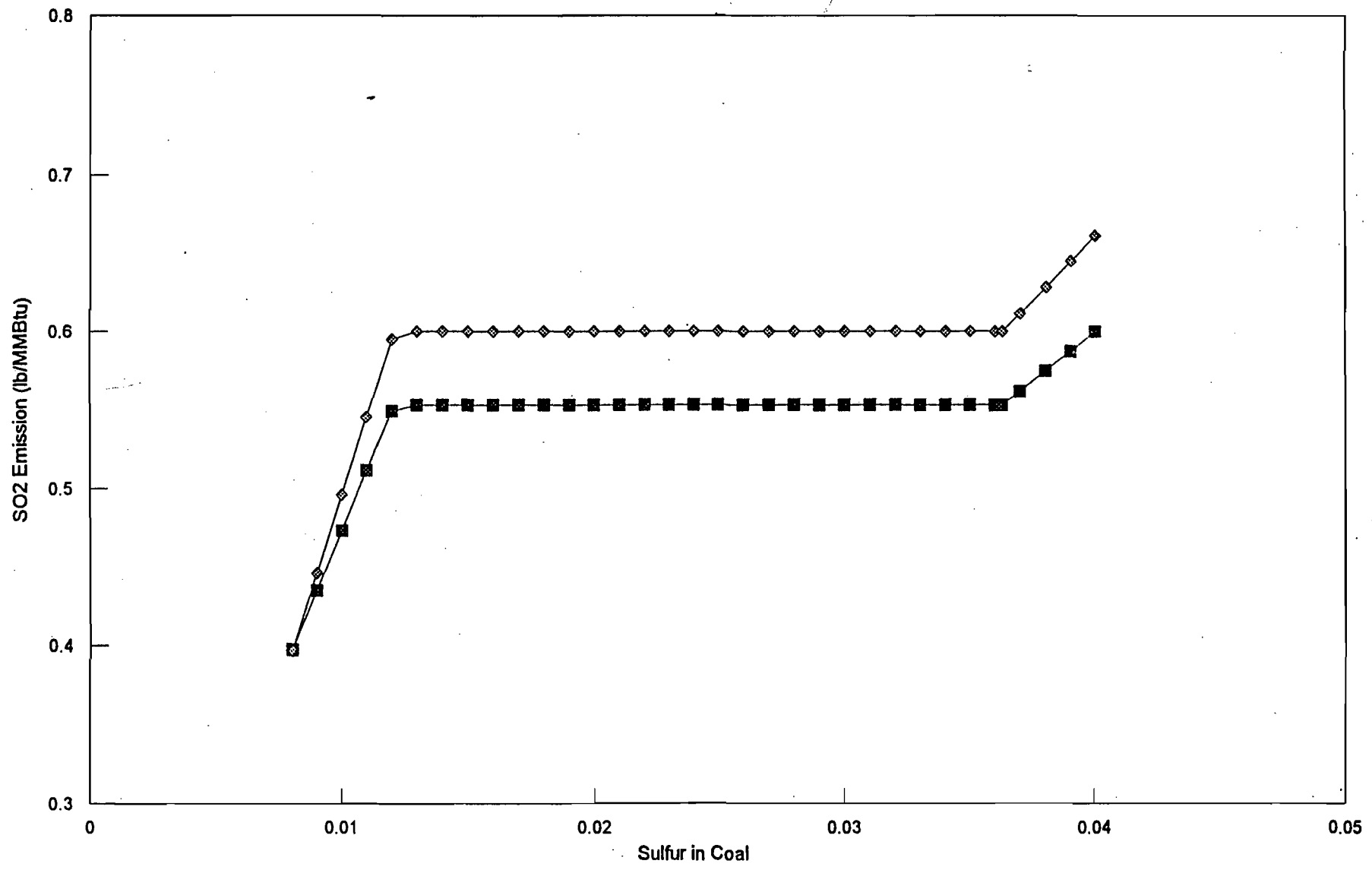
- Coal at 0.76 lb / MMBtu, and
- Petroleum Coke at 0.4 lb / MMBtu

Calculation:

$$\left(\frac{76.6}{100} \times 0.76 \text{ lb / MMBtu} \right) + \left(\frac{23.4}{100} \times 0.4 \text{ lb / MMBtu} \right) = 0.676 \text{ lb / MMBtu}$$

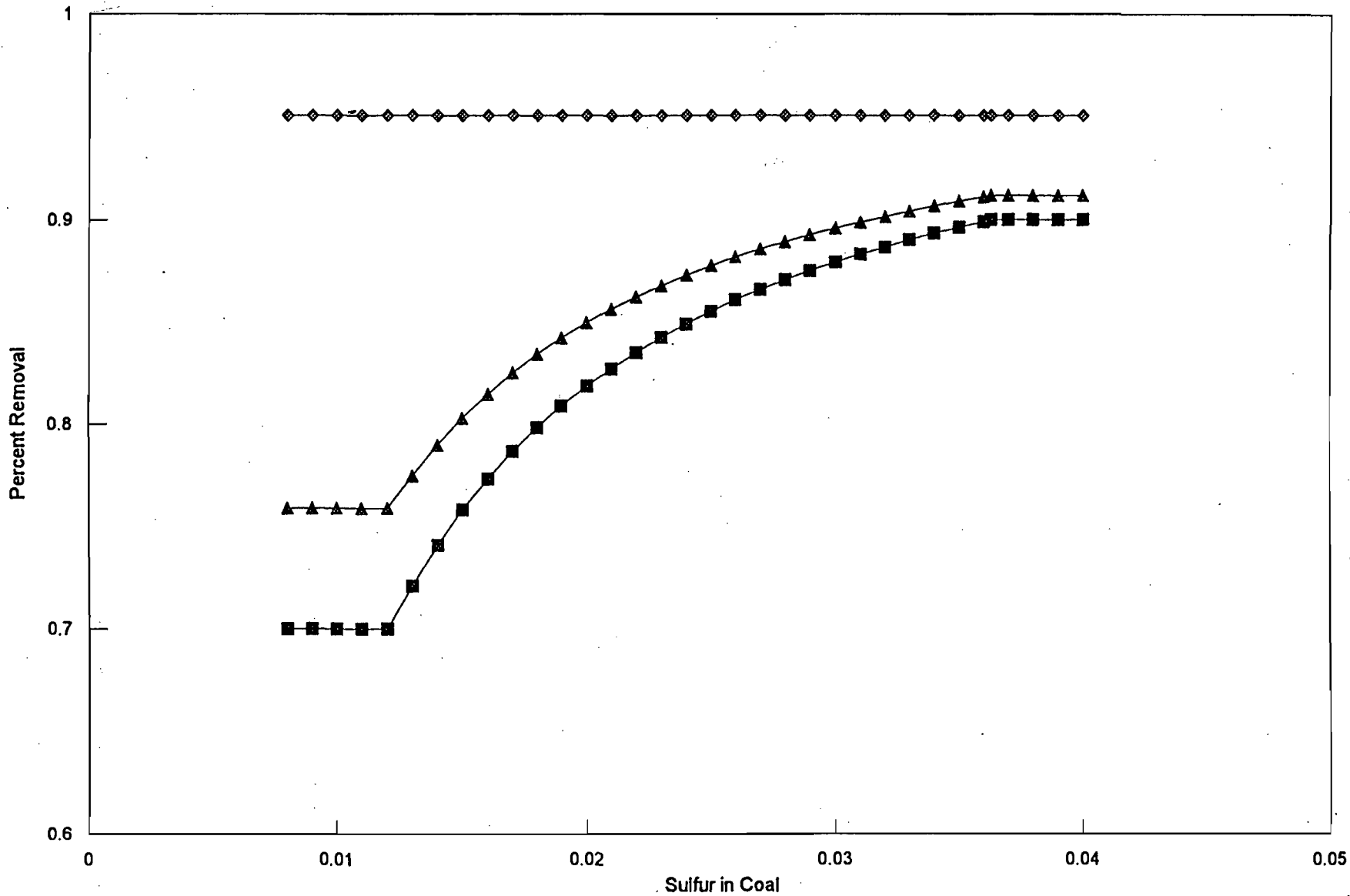
Emission Limits

SO2 Emission Rate vs. Percent Sulfur in Coal



■ Combined Emission Limit ♦ Coal SO2 NSPS Limit

Percent Removal
SO₂ Removal vs. Percent Sulfur in Coal



■ Coal SO₂ Removal ◆ Pet Coke SO₂ Removal ▲ Combined Scrubber Efficiency



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ORDER EXTENDING PERMIT EXPIRATION DATE

Jacksonville Electric Authority Northside Generating Station/St. Johns River Power Park
Facility ID No.: 0310045

Section 403.0872(2)(b), Florida Statutes (F.S.), specifies that any facility which submits to the Department of Environmental Protection (Department) a timely and complete application for a Title V permit "is entitled to operate in compliance with its existing air permit pending the conclusion of proceedings associated with its application."

Section 403.0872(6), F.S., provides that a proposed Title V permit which is not objected to by the United States Environmental Protection Agency (EPA) "must become final no later than fifty-five (55) days after the date on which the proposed permit was mailed" to the EPA.

Pursuant to the Federal Acid Rain Program as defined in rule 62-210.200, Florida Administrative Code (F.A.C.), all Acid Rain permitting must become effective on January 1 of a given year.

This facility which will be permitted pursuant to section 403.0872, F.S., (Title V permit) will be required to have a permit effective date subsequent to the final processing date of the facility's Title V permit.

To prevent misunderstanding and to assure that the above identified facility continues to comply with existing permit terms and conditions until its Title V permit becomes effective, it is necessary to extend the expiration date(s) of its existing valid permit(s) until the effective date of its Title V permit. Therefore, under the authority granted to the Department by section 403.061(8), F.S., **IT IS ORDERED:**

1. The expiration date(s) of the existing valid permit(s) under which the above identified facility is currently operating is (are) hereby extended until the effective date of its permit issued pursuant to section 403.0872, F.S., (Title V permit);
2. The facility shall comply with all terms and conditions of its existing valid permit(s) until the effective date of its Title V permit;
3. The facility will continue to comply with the requirements of Chapter 62-214, F.A.C., and the Federal Acid Rain Program, as defined in rule 62-210.200, F.A.C., pending final issuance of its Title V permit.

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes (F.S.). Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. 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 must be filed within 21 days of receipt of this Order. A petitioner must 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 of the Florida Statutes, 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

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

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 Order. 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.

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

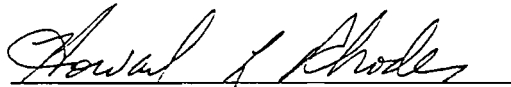
This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 13 day of Nov, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
850/488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this order and all copies were sent by certified mail before the close of business on 11/17/97 to the person(s) listed:

Mr. Walter P. Brussels, Managing Director/Responsible Official, JEA

Mr. Jon P. Eckenbach, Executive Vice President/Designated Representative, JEA

Mr. Bert Gianazza, JEA, Application Contact

Mr. James L. Manning, AWQD

Clerk Stamp

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

Barbara J. Pentwell 11/17/97
(Clerk) (Date)



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

TO: Bert Gianazza JEA

DATE: 9-30-97

PHONE: 904/632-6247

FAX: 904/632-7376

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 3

FROM: Bruce Mitchell

DIVISION OF AIR RESOURCES MANAGEMENT

COMMENTS: PN - no later than 10/7/97

Flint,
Bruce

PHONE: 850/488-1344

FAX NUMBER: 850 /922-6979

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V DRAFT Permit No.: 0310047-001-AV
Jacksonville Electric Authority
Northside Generating Station/St. Johns River Power Park
Duval County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Jacksonville Electric Authority for the Northside Generating Station/St. Johns River Power Park located at 4377 Heckscher Drive, Jacksonville, Duval County. The applicant's name and address are: Jacksonville Electric Authority, 21 West Church Street, Jacksonville, Florida 32202.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, Florida Statutes (F.S.). Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with 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 of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. A petitioner must 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 applicable 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;

- (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;
- (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority'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 permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

A complete project file 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:

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-1344
Fax: 850/922-6979

Affected Local Program:

City of Jacksonville
Regulatory and Environmental Services Department
Air & Water Quality Division
421 West Church Street, Suite 422
Jacksonville, Florida 32202-4111
Telephone: 904/630-3484
Fax: 904/630-3638

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/488-1344, for additional information.

Table 6. Allowable Emission Limits (Revised; From PSD Permit) (lb/hour; lb/MMBtu)

Emission Unit	SO ₂	NO _x	PM (Revised Original)	Opacity (Percent)
1. Steam Generating Boiler No. 1 (6.144 MMBtu/hr maximum heat input)	4,669.; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
2. Steam Generating Boiler No. 2 (6.144 MMBtu/hr maximum heat input)	4,669; 0.76 (30-day rolling average)	3,686; 0.6	184; 0.03	20
3. Auxiliary boilers (254 MMBtu/hr maximum heat input total)	203; 0.8		25.0; 0.1	20
4. Ship Unloading (2 Grab Buckets)*			1.0	10
5. Feeders to Conveyor A (2 Wet Suppression points)*			0.13	10
6. Conveyor Transfers 1 & 2 (2 points)*			0.57	10
7. Conveyor Transfer 3, 4, 5 & D to D by-pass (4 points)*			2.6	10
8. Conveyor Transfers 6 & 7 (2 points)*			1.0	10
9. Traveling Stacker (3 points)*			0.8	10
10. Bucket Wheel Reclaimer (2 points)*			0.6	10
11. Ship unloading facility coal storage pile			1.6	10
12. Coal handling transfer points ship unloading facility coal pile (8 points)*			1.8	10
13. Rail car unloading (Rotary Dumper)			5	10
14. Coal handling transfer points (6 wet suppression points)			5 (each)	10
15. Coal handling transfer points (11 dry collection)			0.1 (each)	10
16. Coal storage at plant* (10 acres active)			0.5	10
17. Coal storage at plant* (2 to 13-acre inactive piles)			0.02	10
18. Limestone unloading (rail dumper)			0.1	10
19. Limestone transfer points			0.4 (each)	10
20. Cooling towers			67 (each tower)	N/A

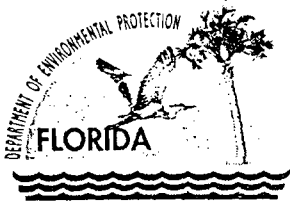
* Revised emission unit. May 1986.

BEST AVAILABLE COPY

Table 2. Fugitive Emissions and Control Summary (Revised; From PSD Permit)

Process	Type	Amount	Factor	Control	Technique	Emission (Grams/Sec)
1 Ship Unloading*	2 Grab Buckets	2,200 Tons/hr	0.0016 lb/Ton [†]	70.0%	Suppression, Enclosure	0.13
2 Feeders to Conveyor A*	2 Points	2,200 Tons/hr	0.00039 lb/Ton	85.0%	Suppression, Enclosure	0.02
3 Conveyor Transferers, 1 and 2*	2 Points	2,200 Tons/hr	0.00087 lb/Ton**	85.0%	Suppression Enclosure	0.07
4 Conveyor Transferers 3, 4, 5 and D to D by-pass*	4 Points	2,200 Tons/hr	0.00118 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.33
5 Conveyor Transferers 6 and 7*	2 Points	2,000 Tons/hr	0.00106 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.13
6 Traveling Stackers*	3 Points: 1 Point	2,200 Tons/hr	0.00031 lb/Ton	75.0%	Enclosure, Conditioned Material	0.02
	1 Point	2,200 Tons/hr	0.00039 lb/Ton	75.0%	Enclosure, Conditioned Material	0.03
	1 Point	2,200 Tons/hr	0.00017 lb/Ton	0.0%		0.05
7 Bucket Wheel Reclaimer*	2 Points	2,000 Tons/hr	0.00063 lb/Ton**	75.0%	Enclosure, Conditioned Material	0.08
8 Ship-Unloading Facility Coal Surge Pile	Active	30 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.20
9 Coal Handling Transfer Points Ship Unloading Facility Coal Pile*	6 Points	2,200 Tons/Hr.	0.00041 lbs/Ton**	75.0%	Enclosure, Conditioned Material	0.23
10 Rail Car Unloading	Rotary Dumper	10,000 Tons/Day	0.4 lb/Ton ^a	(97%) ^b	Wet Suppression	0.63
11 Coal Handling Transfer Points	2 Points	10,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.02
12 Coal Handling Transfer Points	2 Points	3,300 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.01
13 Coal Handling Transfer Points	6 Points	1,300 Tons/Day	0.2 lb/Ton ^c	(97%) ^b	Wet Suppression	0.63
14 Coal Handling Transfer Points	7 Points	5,000 Tons/Day	0.2 lb/Ton ^c	(99.9%) ^b	Dry Collection	0.04
15 Coal Storage At Plant*	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07
16 Coal Storage At Plant*	2 Inactive Piles	10 Acres	0.8 lb/Acre/day ^a	(99%) ^a	Wetting Agent	0.002
17 Limestone Unloading	Rail Dumper	750 Tons/Day	0.4 lb/ton ^a	(97%) ^b	Wet Suppression	0.09
18 Limestone Transfer	1 Point	750 Tons/Day	0.2 lb/Ton ^a	(99.9%) ^b	Dry Collection	0.001
19 Cooling Towers	Drift	2 x 243,500 gal/min	51,450 ppm solids (maximum) (40% < 50 microns diameter)	99.998%	Drift Elimination	12.66
20 Solid Waste Disposal Area	Active	10 Acres	13 lb/Acre/day ^a	(90%) ^a	Wetting Agent	0.07

* Revised process or emissions, May 1986.
[†] Weighted average based on 1,500 and 700 STPH ship unloaders.
^{**} Average of emission factors for individual sources.
 a. Pedco, 1977.
 b. Stoughton, 1980.
 c. EPA, 1979.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

TO: Bert Gaianazza

DATE: 9-24-97 PHONE: 904-632-7376

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 7

FROM: Bruce Mitchell

DIVISION OF AIR RESOURCES MANAGEMENT

COMMENTS: Please review A.10., A.11., A.12., A.23., A.24.,
A.27. and A.42. Give me a call when you can
regarding the text proposal. Thanks
Bruce Mitchell

PHONE: 950/488-1344

FAX NUMBER: 850 /922-6979

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Bruce Mitchell

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



September 11, 1997

Mr. Bruce Mitchell
Environmental Administrator
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

SEP 17 1997

BUREAU OF
AIR REGULATION

RE: Northside Generating Station Units 1, 2, and 3
Title V Permit Application - Supplemental Information

Dear Mr. Mitchell:

Attached please find the landfill gas Fuel Segments for the above referenced units. A gas analysis and predicted maximum gas flow rate from the Northside Municipal Landfill will be forwarded when completed in about six to eight weeks.

As a clarification, the magnesium based fuel additives referred to in the original application are typically in the form of magnesium oxide or hydroxide. Other constituents that may be present include sulfonates, sulfates, nitrates, and/or other non-HAP compounds.

Also enclosed are the Florida Publishing Company affidavits for the Southside and Kennedy Generating Stations' attesting to the August 14, 1997 publication in the Florida Times Union of the "Public Notice of Intent to Issue Title V Operating Permit".

If you have any questions with regard to this matter please contact Bert Gianazza of my staff at (904) 632-6247.

Sincerely,

Richard Breitmoser, P.E.
Vice President, Environmental
Health and Safety Group

RB/NBG

cc: Ron Roberson, RESD
Emerson Raulerson, FDEP, Northeast District

Emissions Unit Information Section _____ of _____

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Landfill gas burned in boiler.	
2. Source Classification Code (SCC): 1-03-008-11	
3. SCC Units: MCF burned	
4. Maximum Hourly Rate: Estimated at 0.32 MCF/hr.	5. Maximum Annual Rate: Estimated at 3000 MCF/yr.
6. Estimated Annual Activity Factor: N/A	
7. Maximum Percent Sulfur: N/A	8. Maximum Percent Ash: N/A
9. Million Btu per SCC Unit: Approx. 620 MBtu/MCF	
10. Segment Comment (limit to 200 characters): Source of gas is Northside Municipal Landfill.	

Emissions Unit Information Section _____ of _____

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Landfill gas burned in boiler.	
2. Source Classification Code (SCC): 1-03-008-11	
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9. Million Btu per SCC Unit: Approx. 620 MBtu/MCF	
10. Segment Comment (limit to 200 characters): Source of gas is Northside Municipal Landfill.	

Emissions Unit Information Section _____ of _____

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6. Estimated Annual Activity Factor: N/A	
7. Maximum Percent Sulfur: N/A	8. Maximum Percent Ash: N/A
9. Million Btu per SCC Unit: Approx. 620 MBtu/MCF	
10. Segment Comment (limit to 200 characters): Source of gas is Northside Municipal Landfill.	

REGULATORY AND ENVIRONMENTAL SERVICES DEPARTMENT

F A X COVER SHEET

AIR AND WATER QUALITY DIVISION

421 West Church Street, Suite 422
Jacksonville, Florida 32202
(904) 630-3484 (Office)
(904) 630-3638 (Fax)

DATE: 9/5/97

TIME: _____

TO: BRUCE MITCHELL
DEP

FAX #: (904) 922-6979

MESSAGE: FULL COPY OF RULE MAILED TO
S. SHEPLAK 9/4/97

FROM: RON ROBERSON

NUMBER OF PAGES FAXED (Including cover): 4

PLEASE CALL (904) 630-3484 IF YOU DO NOT RECEIVE ALL THE PAGES OF THIS FAX
OR IF TRANSMISSION IS UNCLEAR. OUR FAX NUMBER IS (904) 630-3638.

JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD

RULE 2 AIR POLLUTION CONTROL

Effective	03/18/85
Amended	12/15/85
Amended	06/18/86
Amended	06/15/88
Amended	10/27/88
Amended	12/20/88
Amended	07/09/90
Amended	10/22/92
Repealed, renumbered and readopted	01/10/93
Amended	12/19/94, Effective 01/11/95
Amended	09/11/95, Effective 10/05/95
Amended	11/12/96, Effective 12/16/96

**RULE OF THE
JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD
RULE 2
AIR POLLUTION CONTROL**

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PART I - GENERAL PROVISIONS

- 2.101 Definitions
- 2.102 Authority and Intent
- 2.103 Severability
- 2.104 Registration and Reports
- 2.105 Maintenance of Pollution Control Devices
- 2.106 General Restrictions
- 2.107 Air Pollution Prohibited
- 2.108 Enforcement
- 2.109 Investigations - Right of Entry
- 2.110 Penalties and Injunctive Relief

PART II - AIR POLLUTION CONTROL - GENERAL PROVISIONS

- 2.201 Adopts 62-204 FAC by reference

PART III - STATIONARY SOURCES - GENERAL REQUIREMENTS

- 2.301 Adopts 62-210 FAC by reference

PART IV - STATIONARY SOURCES - PRECONSTRUCTION REVIEW

- 2.401 Adopts 62- 212 FAC by reference

PART V - OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION

- 2.501 Adopts 62-213 FAC by reference

PART VI - GASOLINE VAPOR CONTROL

- 2.601 Adopts 62-252 FAC by reference
- 2.602 Expanded Stage I Controls in Duval County

PART VII - OPEN BURNING AND FROST PROTECTION FIRES

- 2.701 Adopts 62-256 FAC by reference

PART VIII - AMBIENT AIR QUALITY STANDARDS

- 2.801 Ambient Air Quality Standard for Aggregate Reduced Sulfur (ARS)

PART IX - AIR POLLUTION EPISODES

- 2.901 Air Pollution Episodes - Local Rules

PART X - STATIONARY SOURCES EMISSION STANDARDS

2.1001 Adopts 62-296 FAC by reference

PART XI - STATIONARY SOURCES - EMISSIONS MONITORING

2.1101 Adopts 62-297 FAC by reference

PART XII - AIR POLLUTION NUISANCE RULES

2.1201 General Standard for Volatile Organic Compounds

2.1202 Emissions from Ships and Locomotives

2.1203 Air Pollution Nuisances

PART XIII - PERMITS - GENERAL PROVISIONS

2.1301 Adopts 62-4 FAC by reference

2.1302 Adopts 120.57 FS and 62-103.150 FAC by reference

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



May 14, 1997

Mr. Robert Leetch, P.E.
Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

RE: Northside Generating Station Units 1 (AO16-194743) and 3 (AO16-207528)
Request for Heat Input Permit Revision

Dear Mr. Leetch:

The above referenced permits have greater heat input limits for gas than for oil. This is due to the greater hydrogen to carbon ratio of gas relative to oil, which results in more water being created during the combustion of gas and more heat being lost through the latent heat of vaporization of the water.

Currently, the oil heat input limit is the applicable limit during dual fuel firing, regardless of the percentage of gas being fired. The purpose of this correspondence is to request a permit revision which would authorize us to prorate the heat input limit in accordance with the percentage of gas being fired.

If you have any questions with regard to this matter, please call Bert Gianazza of my staff at 632-6247.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Breitmoser', is written over a horizontal line.

Richard Breitmoser, P.E.
Vice President, Environmental
Health & Safety Group

RB/NBG

cc: Emerson Raulerson, FDEP, Northeast District
Ron Roberson, RESD
Jonathan Holtom, FDEP, Tallahassee

bc: Robert Kappelmann
George Rizk
Galan Connell
Brian Wray
Stan Stokes
Bert Gianazza
Files 4.3.1.1
4.3.1.3

PERMREV

Page 2 of 4

INTEROFFICE MEMORANDUM

- 1 Teresa
- 2 Bruce
- 3 Ed
- 4 Ed
- 5 Joe

Date: 10-Apr-1997 03:43pm EST
 From: Tom Cascio TAL
 CASCIO_T
 Dept: Air Resources Management
 Tel No: 904/488-1344

TO: 10 addressees

Subject: NOX EARLY ELECTION COMPLIANCE PLANS

We received in the mail today Phase I Permits from EPA with NOx Early Election Compliance Plans for:

- Deerhaven Generating Station (Gainesville Regional Utilities) — 0010006-001-AV
- St. Johns River Power Park (Jacksonville Electric Authority) — 0310001-001-AV
- C.D. McIntosh Power Plant (City of Lakeland)
- Seminole Power Plant (Seminole Electric Cooperative)
- Crystal River Plant (Florida Power Corporation)

We will need to include these as attachments to the Draft Permits. I'll give the originals to Barb for filing.

Tom

Will need special subsection B.
 { see Example from
 Lakeland McIntosh 1050004-003-AV }
 S.H.
 7/21

Subsection B. This subsection addresses Acid Rain, Phase I.

{Permitting note: The U.S. EPA issues Acid Rain Phase I permit(s)}

The emissions unit listed below is regulated under Acid Rain Part, Phase I

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-006	Boiler - McIntosh Unit 3

The provisions of the federal Acid Rain, Phase I permit(s), including Early Election Plans for NO_x, govern(s) the above listed emissions unit(s) from the date of issuance of this Title V permit through December 31, 1999. The provisions of the Phase II permit govern(s) those emissions unit(s) from January 1, 2000 through the expiration date of this Title V permit. The Phase II permit governs all other affected units for the effective period of this permit.

B.1. The Phase I permit(s), including Early Election Plans for NO_x, issued by the U.S. EPA, is a part of this permit. The owners and operators of these Phase I acid rain unit(s) must comply with the standard requirements and special provisions set forth in the permit(s) listed below:

- a. Phase I permit dated 03/27/97.
[Chapter 62-213, F.A.C.]

B.2. Comments, notes, and justifications: none

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



August 12, 1997

RECEIVED

AUG 13 1997

BUREAU OF
AIR REGULATION

Mr. Bruce Mitchell
Environmental Administrator
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Southside Generating Station
Kennedy Generating Station
Title V Permit Applications - Supplemental Information

Dear Mr. Mitchell:

Attached please find the propane Fuel Segments, revised O&M plans, and Designated Representative Certificates of Representation for the above referenced facilities.

As a clarification, the magnesium based fuel additives referred to in the original applications are typically in the form of magnesium oxide or hydroxide. Other constituents that may be present include sulfonates, sulfates, nitrates, and/or other non-HAP compounds.

Also, the Southside Generating Station currently has no emergency generators while the Kennedy Generating Station has two black-start generators and one emergency generator. These generators operate very infrequently and qualify for the insignificant activity exemption.

Finally, please change the opacity election under 62-296.405(1)(a) for KGS units 8, 9, and 10; and SGS units 4 and 5 from one 2-minute average at 40% per hour to one 6-minute average at 27% per hour.



Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24

This submission is: New Revised

This submission includes combustion or process sources under 40 CFR part 74

STEP 1

Identify the source by plant name, State, and, if applicable, ORIS code from NADB.

Plant Name St. Johns River Power Park	State FL	ORIS Code 207
--	-------------	------------------

STEP 2

Enter requested information for the designated representative.

Name Jon P. Eckenbach, Executive Vice President	
Address 21 W. Church St.-Tower 16 Jacksonville, FL 32202	
Phone Number (904) 632-6315	Fax Number (904) 632-7366

STEP 3

Enter requested information for the alternate designated representative, if applicable.

Name Richard Breitmoser	
Address 21 W. Church St., Tower 8 Jacksonville, FL 32202	
Phone Number (904)632-6245	Fax Number (904)632-7376

STEP 4

Complete Step 5, read the certifications, and sign and date. For a designated representative of a combustion or process source under 40 CFR part 74, the references in the certifications to "affected unit" or "affected units" also apply to the combustion or process source under 40 CFR part 74 and the references to "affected source" also apply to the source at which the combustion or process source is located.

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable, for the affected source and each affected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

St. Johns River Power Park

Plant Name (from Step 1)

Certificate Page 2

Page of

The agreement by which I was selected as the alternate designated representative, if applicable, includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

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.

Signature (designated representative)	Date 5/12/97
Signature (alternate designated representative)	Date 6/10/97

STEP 5

Provide the name of every owner and operator of the source and each affected unit (or combustion or process source) at the source. Identify the units they own and/or operate by boiler ID# from NADB, if applicable. For owners only, identify each state or local utility regulatory authority with ratemaking jurisdiction over each owner, if applicable.

Jacksonville Electric Authority, SJRPP						<input checked="" type="checkbox"/> Owner	<input checked="" type="checkbox"/> Operator
Name 1 & 2							
ID# 1	ID# 2	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities Florida Dept. of Env. Protection/Reg. & Env. Svcs. Dept. (City of Jacksonville)							

Name Florida Power & Light						<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID# 1	ID# 2	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Date 6/3/97
Log # 1680
Clerk 1 [Signature]
Date 6/3/97
Clerk 2
Date
Trans. #
Note:
Log Clerk



Certificate of Representation

Page 1

For more information, see instructions and refer to 40 CFR 72.24

This submission is: New RevisedThis submission includes combustion or process sources under 40 CFR part 74 **STEP 1**

Identify the source by plant name, State, and, if applicable, ORIS code from NADB.

Plant Name JEA, Northside Generating Station	State FL	ORIS Code 0667
---	-------------	-------------------

STEP 2

Enter requested information for the designated representative.

Name Jon P. Eckenbach, Executive Vice President	
Address 21 West Church St., Tower 16 Jacksonville, FL 32202	
Phone Number (904) 632-6315	Fax Number (904) 632-7366

STEP 3

Enter requested information for the alternate designated representative, if applicable.

Name Richard Breitmoser	
Address 21 W. Church St., Tower 8 Jacksonville, FL 32202	
Phone Number (904) 632-6245	Fax Number (904) 632-7376

STEP 4

Complete Step 5, read the certifications, and sign and date. For a designated representative of a combustion or process source under 40 CFR part 74, the references in the certifications to "affected unit" or "affected units" also apply to the combustion or process source under 40 CFR part 74 and the references to "affected source" also apply to the source at which the combustion or process source is located.

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable, for the affected source and each affected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

JEA, Northside Generating Station
 Plant Name (from Step 1)

The agreement by which I was selected as the alternate designated representative, if applicable, includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

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.

Signature (designated representative)	Date 5/12/97
Signature (alternate designated representative)	Date 6/10/97

STEP 5
 Provide the name of every owner and operator of the source and each affected unit (or combustion or process source) at the source. Identify the units they own and/or operate by boiler ID# from NADB, if applicable. For owners only, identify each state or local utility regulatory authority with ratemaking jurisdiction over each owner, if applicable.

Name Jacksonville Electric Authority						<input checked="" type="checkbox"/> Owner	<input checked="" type="checkbox"/> Operator
ID# 1	ID# 2	ID# 3	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities Florida Dept. of Env. Protection/Reg. & Env. Services (City of Jacksonville)							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Date 6/3/97
Log # 1678
Clerk 1
Date
Clerk 2
Date
Trans. #
Note
Log Clerk



Department of Environmental Protection

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite 8200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

CERTIFIED - RETURN RECEIPT

June 17, 1997

In the matter of a
Permit Revision

For: Mr. Walt Bussells
Managing Director
Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202

DEP Permit Nos. AO16-194743 & AO16-207528
Duval County - AP
Facility ID# 0310045001 & 003
Northside Steam Generator Nos. 1 & 3

Dear Mr. Bussells:

Pursuant to the May 14, 1997 letter from Richard Breitmoser, P.E., Vice President, Environmental Health & Safety Group at JEA, requesting a revision to the referenced Permits, the request is hereby approved. Therefore, Specific Condition No. 13 of Permit No. AO16-194743 shall now read as follows:

13. Maximum heat input shall be limited as follows:

<u>Fuel</u>	<u>Maximum Heat Input</u>
No. 6 Fuel Oil	2767 x 10 ⁶ BTU/hr
Natural Gas	2892 x 10 ⁶ BTU/hr
Dual Fired	See Note (1)

Note(1): When fired together, the sum of the percent of the maximum of each shall not exceed 100%. For example, if fuel oil is burned at 80% of its maximum allowable rate, the burning rate of natural gas shall not exceed 20% of its maximum allowable rate.

Specific Condition No. 15 of Permit No. AO16-207528 shall now read as follows:

15. The maximum heat input shall be limited as follows:

<u>Fuel</u>	<u>Maximum Heat Input</u>
No. 6 Fuel Oil	5033 x 10 ⁶ BTU/hr
Natural Gas	5260 x 10 ⁶ BTU/hr
Dual Fired	See Note (1)

Note(1): When fired together, the sum of the percent of the maximum of each shall not exceed 100%. For example, if fuel oil is burned at 80% of its maximum allowable rate, the burning rate of natural gas shall not exceed 20% of its maximum allowable rate.

All other conditions and requirements of the Permit shall remain in effect and fully enforceable. Please attach this letter to the referenced permit of which it becomes a permanent part.

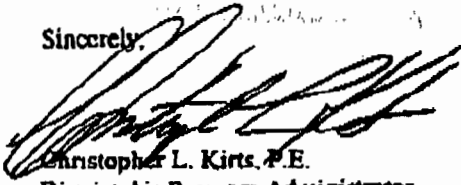
"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Permit Revisions
AO16-194743 & AO16-207528
June 17, 1997

Any party to this Order (permit revision) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Sincerely,



Christopher L. Kirts, P.E.
District Air Program Administrator

CLK: ~~xxx~~

cc: Richard Breitmoser, P.E. - IEA
N. Bert Gianazza, P.E. - IEA
Ron Roberson, RESD

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
[Signature] 4/17/97
Clerk Date

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



January 8, 1997

Mr. Jonathan Holtom
Engineer IV
Title V Section, Mail Station 5505
Florida Dept. of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399

RECEIVED
JAN 09 1997
BUREAU OF
AIR REGULATION

Dear Mr. Holtom:

RE: Northside Generating Station/St. Johns River Power Park
Kennedy Generating Station
Southside Generating Station
Title V Permit Applications -- Supplemental Information

Attached please find revised lists of exempt and trivial activities for the above referenced facilities. The trivial activities list is standardized for all three JEA facilities.

Please note that the changes to the "trivial" activities list are shown as overstrikes, and the exempt activities are limited to emergency generators and, in the case of Northside Generating Station, a small lime silo.

If you have any questions with regard to this matter, please contact Bert Gianazza of my staff at (904) 632-6247.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Breitmoser', with a long horizontal line extending to the right.

Richard Breitmoser, P.E.
Vice-President, Environmental
Health & Safety Group

RB/NBG

Document ID #6
trivial
List of Exempt Activities

Indoor sand blasting and abrasive grit blasting where temporary enclosures are used to contain particulates

Coal pile runoff ponds

Open stockpiling of material

Plant grounds maintenance

Routine maintenance/repair activities such as cleaning, welding, non-asbestos insulation removal, hand held tools/equip., meter repair/maintenance, on-line/off-line cleaning of equip.

Main steam pressure/relief valves; steam from boiler operations

Non-halogenated solvent cleaning operations

Indoor fugitives such as vacuum cleaning, solvent storage, office supplies/equipment

Testing equipment such as CEMs, stack sampling calibration gases, oxygen detector

Internal combustion engines which drive compressors, generators, water pumps, or other auxiliary equipment

HVAC (heating, ventilation, and air conditioning systems)

Vent/exhaust systems for:

- Print room storage cabinets
- Transformer vaults/bldg.
- Maint./welding bldgs.
- Operating equipment vents
- Degasifier/dearators/decarbonators
- Air blowers/evacuators/air locks
- Feedwater heater vents

Transformers, switches, and switchgear processing (including cleaning and changing) and venting

Use of nitrogen cap during boiler shut-down

Generator venting

Vent/exhaust from kitchen and breakrooms

Vents/stacks for sewer lines or enclosed areas req. for safety or by code

Electrically heated equipment used for heat treating, tracing, drying, soaking, case hardening or surface conditioning

Sewage treatment fac./equip. ranging in size from porta-john to sewage treatment plants

Stack washing (water, soot)

Cleaning and dewatering of ash basins (heavy equipment/pumps)

Engine rebuilding

Lube oil changes

Receiving fuel oil (truck & pipeline)

Aerosol can use (cleaners, etc.)

Boiler chemical cleaning (cirtosolv & ammonia)

~~Sootblowing~~

Liming the boilers (CaOH)

Turbine washing

Boiler gun cleaning (guns dipped into vats of solvent)

Vehicle servicing (oil changes, antifreeze changes, etc.)

Soldering of electrical components (silver, tine solder)

Portable equipment and tools, including electric and gasoline powered

Electro plating

Welding, grinding and cutting activities (metal fumes)

Machining metal parts (cutting oil, metal fumes)

Cleaning condensers (water vapor, "snoop")

Oil spills (#6, #2, turbine lube oil)

Oil-filled electrical equipment vents

Storage and use of boiler chemicals (phosphates, ammonia, hydrazine, magnesium oxide, sodium tripolyphosphate, soda ash, di- and tri-sodium phosphate)

Fume hood in laboratory

Laboratory equipment

Space heaters

Fire and safety equipment

Steam releases

Storage and use of chemicals solely for water/waste water treatment

Neutralization basins/ponds, ash pits/ponds, TETF/ENU, percolation, equalization

Transfer sumps

Firefighting training facilities

Turbine vapor extractor

Lawn maintenance equipment/activities

Application of fungicide, herbicide, pesticide

Air compressors and centrifuges used for compressing air

Handling and removal of clinkers, slag and bottom ash

Recovered materials recycling systems including: bulb crushers, aerosol can puncturing

Waste accumulation/consolidation

Compressed air system

Storage tanks less than 550 gallons

Storage of products in sealed containers

Nuclear gauges used for the purpose of process monitoring

Hydrogen and acid venting from battery rooms vacuum vents for gypsum dewatering bldg

Flue gas desulfurization system absorber feed tank mist eliminator/spray header vent

Renovation/demolition of asbestos

Fires

Chemical spills, leaks & transfers

Oil spills, leaks & change out

Insulating activities

Asphalt or concrete sealing

High pressure water blasting

Excavations for construction activities

Chemical cleaning

- boiler
- turbine
- heat exchanger
- misc. plant machinery
- solvent cleaning (parts & circuit boards)

Cleaning furnace bottoms or slag removal

Welding all types

Cutting all types

- milling & machining

Sanding or grinding - all types

Emission from portable equipment

- welding machines (diesel or gas)
- pumps (diesel or gas)

Sweeping

Pipe line repairs

- fly ash
- bottom ash
- slurry or sludge transfer
- fuel line
- process water (cooling water, ash water or condensate)
- refuse transport line
- Miscellaneous other process lines -

Bag house repairs

Filter change out (oil & air)

Air conditioner repairs

Battery maintenance

Coal feeder maintenance

Refuse feeder maintenance

Other miscellaneous maintenance

Bottom ash removal (from boilers)

Fuel oil storage tank cleaning

Small parts washing using parts washer

A/C servicing by licensed contractor

Searching for condenser leaks using helium

~~Emergency generators~~

mercury containing equipment such as manometers

non-chlorinated solvent degreasing equipment

vacuum pumps in laboratory operations

equipment use for steam cleaning

Document ID #6A

Southside Generating Station

List of Exempt Activities

Emergency Generators

Document ID #6A

Kennedy Generating Station

List of Exempt Activities

Emergency Generators

Document ID #6A

Northside Generating Station/St. Johns River Power Park

List of Exempt Activities

Emergency Generators

Lime Silo

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



September 11, 1996

RECEIVED
SEP 16 1996
BUREAU OF
AIR REGULATION

Mr. Jonathan Holtom

Title V Section
Mail Station 5505
Florida Dept. of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399

Dear Mr. Holtom:

RE: Northside Generating Station
Kennedy Generating Station
Southside Generating Station
Title V Permit Applications -- Supplemental Information

Attached please find the permit revision dated May 1, 1995 removing the throughput limits on the fuel storage tanks at each of the above facilities.

Also enclosed is the permit revision dated July 16, 1996 removing the fuel sulfur limits at the Northside station and providing for using the CEMs to show continuous compliance with the SO₂ emission limit using a 24-hour midnight-to-midnight average.

Finally, please note that no information was provided for Unit 3 at the Southside station since that unit is no longer in service and the air operating permit has been allowed to expire. Southside Units 1 and 2 air operating permits were surrendered during the St. Johns River Power Park permitting process and the emissions were used as offsets for modeling PSD increment consumption.

was it extend by Rule?

Mr. Jonathan Holtom
September 11, 1996
Page Two

All of these conditions are reflected in the Title V permit application as previously submitted.

If you have any questions with regard to this matter, please contact Bert Gianazza of my staff at (904) 632-6247.

Sincerely,

A handwritten signature in black ink, appearing to be "Richard Breitmoser", with a long horizontal line extending to the right.

Richard Breitmoser, P.E.
Vice-President
Environmental Health &
Safety Group

RB/NBG

TITLEV2

**REGULATORY & ENVIRONMENTAL
SERVICES DEPARTMENT**
Air Quality Division



May 1, 1995

Mr. Robert Leetch, P.E.
Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

JACKSONVILLE ELECTRIC AUTHORITY

RECEIVED

MAY 03 1995

Environmental, Health
& Safety Department

**RE: Duval County - Air Pollution
JEA Generating Station Fuel Storage Tanks
Kennedy Permit No. AO16-225064
Northside Permit No. AO16-225069
Southside Permit No. AO16-225066**

Dear Mr. Leetch:

The City of Jacksonville, Regulatory and Environmental Services Department, Air Quality Division (AQD) received a request on March 31, 1995 from JEA to amend the above referenced permits (attachment). The request is to delete throughput limits and the associated record-keeping requirements. In accordance with the Standard Operating Agreement, AQD is referring this request to your office for processing and final agency action.

AQD has reviewed this request and provides the following recommendations.

1. Specific Condition 7. of each referenced permit limits the throughput of No. 6 and No. 2 fuel oil. AQD agrees with JEA that the throughput limits should be eliminated.
2. AQD recommends that the record-keeping requirements for fuel oil throughput be maintained. An estimate of emissions for the AOR and Title V inventories will require this data.



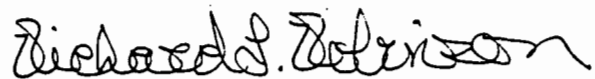
421 West Church Street - Suite 412
Jacksonville, Florida 32202-4111

Area Code 904/630-3484

Mr. Robert Leetch, P.E.
May 1, 1995
Page 2

Please contact me or Mr. Ronald L. Roberson at (904) 630-3484 for any additional information.

Very truly yours,



Richard L. Roberson, P.E.
Pollution Control Engineer

RLR/ecr

Attachment

c: ✓ Mr. Richard Breitmoser, P.E. - JEA
Mr. Wayne Tutt, AQD
AQD File 1700-A
AQD Permitting File



Department of Environmental Protection

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT

July 16, 1996

Mr. Walt Bussells, Managing Director
Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202-3139

Dear Mr. Bussells:

Duval Co. - AP
Jacksonville Electric Authority
Northside Generating Plant - Unit #1
I.D. No. 0310045001 (formerly 31JAX16004501)

Per your 09-26-95 request letter and discussions between the Department and the City of Jacksonville's Regulatory and Environmental Services Department, Air and Water Quality Division (AWQD), Permit No. AO16-194743 is revised as follows:

A. Specific Condition No. 8 is revised by adding an additional notation (denoted by ***) requiring the use of the CEM to show continual compliance with the SO₂ limit as follows:

8. The following pollutants(s) shall be tested at intervals indicated from the date of September 1, 1990:

<u>Pt. No.</u>	<u>Pollutant</u>	<u>Interval</u>	<u>*Test Method</u>
01	Particulate Matter (PM) (Non-Soot Blowing)	12 months	EPA Reference Method (RM) 5/17
	(Soot Blowing)	12 months	EPA RM 5/17
	**Visible Emissions (VE) (Non-Soot Blowing)	12 months	EPA RM 9
	(Soot Blowing)	12 months	EPA RM 9
	***Sulfur Dioxide (SO ₂)	12 months	EPA RM 6

* As described in 40 CFR 60, Appendix A (July 1, 1989)

** Shall be conducted simultaneously with particulate testing during soot blowing and non-soot blowing operating modes.

*** Compliance with the SO₂ emission limiting standard shall be determined on a continual basis using a 24-hour daily average and a certified Continuous Emissions Monitor (CEM) or equivalent method as provided by 40 CFR 75, with a day being defined as a 24-hour period between 12:01 a.m. and 12:00 midnight. In the event the CEM becomes unoperational the ratio of fuel oil to gas flow rates will be recorded. The same fuel oil supply will then continue to be used with the maximum ratio of oil to gas flow rates set at the same level or, if necessary to ensure compliance, at a lower level. Alternatively, the unit may be switched over to a fuel oil supply known to have a maximum sulfur content of 1.8% or less. These modes of operation shall be

8. (cont.):

maintained until operation of the CEM is restored.

In the event of a complete natural gas curtailment the unit will be switched over to a fuel oil supply known to have a maximum sulfur content of 1.8% or less. Best operational practices will be adhered to at all times in order to minimize any excess emissions resulting from an unexpected gas curtailment.

B. Specific Condition No. 12 is revised by adding the acceptability of using the RATA in place of the annual compliance test to show compliance with the SO₂ limit as follows:

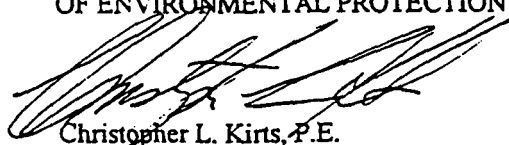
12. Either the Relative Accuracy Testing Audit (RATA) that is performed for the SO₂ Continuous Emissions Monitor (CEM) or a sulfur analysis of the No. 6 fuel oil, as fired while testing for compliance, may be substituted for EPA RM 6. All sulfur content analyses shall be performed in accordance with ASTM D 2622-82 (sulfur in Petroleum Products X-Ray Spectrographic Method), or other method approved in advance by AWQD and shall be reported as the sulfur content by percent (%) weight.

This letter and the request shall become a part of the permit.

Any party to this Order (permit revision) has the right to seek judicial review of the permit revision pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Christopher L. Kirts, P.E.
District Air Program Administrator

CLK:RJL: ~~ECR~~

cc: Office of General Counsel - Air Permitting
Richard Robinson, P.E. - RESD
Richard Breitmoser, P.E. - JEA
Bert Gianazza, P.E. - JEA

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Steven Y. [Signature] 7/18/96
Clerk Date



Department of Environmental Protection

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT

July 16, 1996

Mr. Walt Bussells, Managing Director
Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202-3139

Dear Mr. Bussells:

Duval Co. - AP
Jacksonville Electric Authority
Northside Generating Plant - Unit #3
I.D. No. 0310045003 (formerly 31JAX16004503)

Per your 09-26-95 request letter and discussions between the Department and the City of Jacksonville's Regulatory and Environmental Services Department, Air and Water Quality Division (AWQD), Permit No. AO16-207528 is revised as shown below.

A. Note 2 of Specific Condition No. 8 is revised by adding the acceptability of using the RATA in place of the annual compliance test to show compliance with the SO₂ limit as follows:

2. Either the Relative Accuracy Testing Audit (RATA) that is performed for the SO₂ Continuous Emissions Monitor (CEM) or a sulfur analysis of the No. 6 fuel oil, as fired while testing for compliance, may be substituted for EPA RM 6. All sulfur content analyses shall be performed in accordance with ASTM D 2622-82 (sulfur in Petroleum Products X-Ray Spectrographic Method), or other method approved in advance by AWQD.

B. Specific Condition No. 17 is revised by removing the limit on the sulfur content of No. 6 Fuel Oil (except under certain conditions) and by requiring the use of the CEM to be used to show compliance with the SO₂ limit as follows:

17. Compliance with the SO₂ emission limiting standard on a continual basis shall be determined using a 24-hour daily average and a certified Continuous Emissions Monitor (CEM), or equivalent method as provided by 40 CFR 75, with a day being as defined in Specific Condition No. 9. In the event the CEM becomes unoperational the ratio of fuel oil to gas flow rates will be recorded. The same fuel oil supply will then continue to be used with the maximum ratio of oil to gas flow rates set at the same level or, if necessary to ensure compliance, at a lower level. Alternatively, the unit may be switched over to a fuel oil supply known to have a maximum sulfur content of 1.8% or less. These modes of operation will be maintained until operation of the CEM is restored.

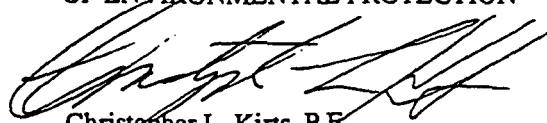
In the event of a complete natural gas curtailment the unit will be switched over to a fuel oil supply known to have a maximum sulfur content of 1.8% or less. Best operational practices will be adhered to at all times in order to minimize any excess emissions resulting from an unexpected gas curtailment.

This letter and the request shall become a part of the permit.

Any party to this Order (permit revision) has the right to seek judicial review of the permit revision pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Christopher L. Kirts, P.E.
District Air Program Administrator

CLK:RJL:EK

cc: Office of General Counsel - Air Permitting
Richard Robinson, P.E. - RESD
Richard Breitmoser, P.E. - JEA
Bert Gianazza, P.E. - JEA

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52 Florida
Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.
Heleen B. [Signature] 7/18/96
Clerk Date

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



June 14, 1996

Mr. John Brown, P.E.
P.E. Administrator
Title V Section
Mail Station 5505
Florida Dept. of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399

RECEIVED
JUN 14 1996
BUREAU OF
AIR REGULATION

Dear Mr. Brown:

RE: St. Johns River Power Park
Northside Generating Station
Kennedy Generating Station
Southside Generating Station
Title V Permit Applications

Attached please find the required Title V permit applications for the above referenced power plants. Please note that the St. Johns River Power Park (SJRPP) and the Northside Generating Station are one facility under the Title V definition of "facility" (even though in the traditional sense they are two separate plants) and therefore the parts of the application that apply to the facility as a whole appear in the ring binder for SJRPP only. The unit-specific parts of the application were kept separate to minimize any potential confusion between the two plants.

All of the above plants will be disposing of non-hazardous boiler chemical cleaning waste in accordance with the recently issued DARM guidance document, "Disposal of Non-Hazardous Boiler Chemical Cleaning Waste by Incineration and Evaporation". If this needs to be reflected in our Title V permit in any fashion, please include the proper language required in the permit or advise us of any additional information needed to permit this activity.

Mr. John Brown
June 14, 1996
Page Two

If you have any questions with regard to this matter, please contact Bert Gianazza of my staff at (904) 632-6247.

Sincerely,

A handwritten signature in black ink, appearing to be 'RB', with a long horizontal line extending to the right.

Richard Breitmoser, P.E.
Vice-President
Environmental Health &
Safety Group

RB/NBG

TITLEVAP

Attachment NGS: CT Heat Input Nominal Values

NORTHSIDE STATION COMBUSTION TURBINES
BASE LOAD MW vs TEMPERATURE

#	AMBIENT TEMP *F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR	AMBIENT TEMP *F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR
1	20	67.97	67.63	868	60	58.77	58.43	747
2	21	67.74	67.40	865	61	58.54	58.20	744
3	22	67.51	67.17	861	62	58.31	57.97	741
4	23	67.28	66.94	858	63	58.08	57.74	738
5	24	67.05	66.71	855	64	57.85	57.51	735
6	25	66.82	66.48	852	65	57.62	57.28	733
7	26	66.59	66.25	849	66	57.39	57.05	730
8	27	66.36	66.02	846	67	57.16	56.82	727
9	28	66.13	65.79	842	68	56.93	56.59	724
10	29	65.90	65.56	839	69	56.70	56.36	721
11	30	65.67	65.33	836	70	56.47	56.13	719
12	31	65.44	65.10	833	71	56.24	55.90	716
13	32	65.21	64.87	830	72	56.01	55.67	713
14	33	64.98	64.64	827	73	55.78	55.44	710
15	34	64.75	64.41	824	74	55.55	55.21	708
16	35	64.52	64.18	821	75	55.32	54.98	705
17	36	64.29	63.95	818	76	55.09	54.75	702
18	37	64.06	63.72	815	77	54.86	54.52	699
19	38	63.83	63.49	812	78	54.63	54.29	697
20	39	63.60	63.26	809	79	54.40	54.06	694
21	40	63.37	63.03	806	80	54.17	53.83	691
22	41	63.14	62.80	802	81	53.94	53.60	689
23	42	62.91	62.57	799	82	53.71	53.37	686
24	43	62.68	62.34	796	83	53.48	53.14	683
25	44	62.45	62.11	793	84	53.25	52.91	681
26	45	62.22	61.88	791	85	53.02	52.68	678
27	46	61.99	61.65	788	86	52.79	52.45	675
28	47	61.76	61.42	785	87	52.56	52.22	673
29	48	61.53	61.19	782	88	52.33	51.99	670
30	49	61.30	60.96	779	89	52.10	51.76	667
31	50	61.07	60.73	776	90	51.87	51.53	665
32	51	60.84	60.50	773	91	51.64	51.30	662
33	52	60.61	60.27	770	92	51.41	51.07	660
34	53	60.38	60.04	767	93	51.18	50.84	657
35	54	60.15	59.81	764	94	50.95	50.61	654
36	55	59.92	59.58	761	95	50.72	50.38	652
37	56	59.69	59.35	758	96	50.49	50.15	649
38	57	59.46	59.12	755	97	50.26	49.92	647
39	58	59.23	58.89	753	98	50.03	49.69	644
40	59	59.00	58.66	750	99	49.80	49.46	641
41	60	58.77	58.43	747	100	49.57	49.23	639

KSCT
Y INTERCEPT 72.576
SLOPE 0.2301

DISPATCH HEAT RATE CURVES

A = 1.78910E+02
B = 8.82453E+00
C = -1.50705E-02
D = 5.20028E-04
AA = 3.40192E-01
BB = 9.99987E-01
CC = 1.79499E-07
DATE: 05/21/93

Attachment SJRPP: Material Handling Transfer Points

SJRPP Material Handling Transfer Points for Permitting

<u>Limestone</u>		<u>Points</u>
1)	Limestone receiving bin with 3 Unloading hoppers	1
2)	Unloading hoppers to FLD-1 Belt	3
3)	FLD-1 to L0	1
4)	L0 to L1	1
5)	L1 to L2	1
6)	L2 to Storage Pile	1
7)	Reclaim hopper	1
8)	Hopper to 9LC-02	1
9)	9LC-02 to Silos(2)	2
10)	Silos to 1LC-01,2LC-01 (to ball mills)	2
Total		14

<u>Coal-Yard</u>		<u>Points</u>
1)	Receiving bin with 4 Unloading hoppers	1
2)	4 Unloading hoppers to FCD-1,2,3,4	4
3)	FCD-1,2,3,4 to CO	4
4)	CO to C1	1
5)	C1 to C2	1
	C1 to emergency stackout	1
6)	C2 to C4	1
7)	C4 to C5	1
	C4 to CT6	1
8)	C5 to C6	1
9)	C6 to storage pile	1
	Reclaim to C6 (grab and dump)	2
	C6 to C4	1
10)	Surge Bins	
	C2 to Surge Bin	1
	C3 to Surge Bin	1
	C4 to Surge Bin	1
	Surge Bin to FCR-A,B	2
11)	FCR-A,B to Crushers (2)	2
	Crushers (2)	2
	Crushers to C7,8	2
12)	C7,8 to C9,10	2
13)	C9,10 to 14 Coal Storage Silos	14
Total		47

<u>Coal-Shipunloader</u>		<u>Points</u>
14)	Bucket to Hopper (grab & dump)	2
15)	Hopper to Belt	1
16)	Hopper Belt to CT1	1
17)	CT1 to CT2	1
18)	CT2 to CT3	1
19)	CT3 to CT4	1
20)	Reclaimer to CT4 (grab, dump,dump)	3
21)	CT4 to CT5	1
	CT4 to S1 traveling conveyor	1
	S1 Traveling conv. to S2 boom conv.	1
	S2 boom conv to storage pile	1
22)	CT5 to C2	1
23)	CT6 to CT4	1
Total		16

<u>Coal-Petooko Feeder System</u>		<u>Points</u>
24)	Hopper	1
	Hopper to SPC-1	1
	SPC-1 to PC-1	1
	PC-1 to C4	1
Total		4

<u>Fly & Bottom Ash Handling System</u>		<u>Points</u>
25)	Flyash	
	U#1-A&B Saleable silo Baghouse (2)	
	& roof vents (2)	4
	U#1-1 Non-saleable Silo Baghouse	
	& roof vent	2
	U#1-A loadout Silo discharge (2)	
	& roof vent (1)	3
	U#1-B loadout Silo discharge (2)	
	& roof vent (1)	3
	U#2-A&B Saleable silo Baghouse (2)	
	& roof vents (2)	4
	U#2-A Non-saleable Silo Baghouse	
	& roof vent	2
	U#2-A loadout Silo discharge (2)	
	& roof vent (1)	3
	U#2-B loadout Silo discharge (2)	
	& roof vent (1)	3
26)	Bottom Ash	
	U#1-A&B Silo to conveyor belt	2
	Conveyor belt to truck	1
	U#2-A&B Silo to conveyor belt	2
	Conveyor belt to truck	1
Total		30

Grand Total 111

Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: New Revised

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

St. Johns River Power Park	FL	207
Plant Name	State	ORIS Code

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

Compliance Plan				
a	b	c	d	e
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes			
2	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	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.

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

Plant Name (from Step 1)

Standard Requirements**Permit Requirements.**

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain part application (including a compliance plan) 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 Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain 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(e)) 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 allowance 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 allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain 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 demand 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,

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

Plant Name (from Step 1)

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 I 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, shall 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.

(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 I of 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;

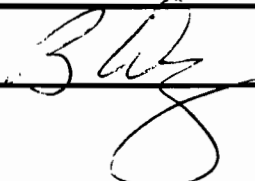
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(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 behalf 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 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 Brian M. Wirz	
Signature 	Date 12/14/95

STEP 5 (optional)
Enter the source AIRS
and FINDS identification
numbers, if known

AIRS
FINDS

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0221
Expires 6-30-86



Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24

This submission is: New Revised

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

Plant Name	St. Johns River Power Park	State	FL	ORIS Code	207
------------	----------------------------	-------	----	-----------	-----

STEP 2
Enter requested
information for the
designated
representative

Name	Brian M. Wirz				
Address	Jacksonville Electric Authority (T-16) 21 West Church Street Jacksonville, Florida 32202				
Phone Number	(904) 632-6457	Fax Number	(904) 632-7366		

STEP 3
Enter requested
information for the
alternate designated
representative
(optional)

Name	Richard Breitmoser				
Address	Jacksonville Electric Authority (T-8) 21 West Church St Jacksonville, Florida 32202				
Phone Number	(904) 632-6245	Fax Number	(904) 632-7376		

STEP 4
Complete Step 5, read
the certifications and
sign and date

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable for the affected source and each affected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or ownership or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

The agreement by which I was selected as the alternate designated representative includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

St. Johns River Power Park
Plant Name (from Step 1)

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.

Signature (designated representative)	Date 8/5/94
Signature (alternate)	Date 8/4/94

STEP 3
Provide the name of every owner and operator of the source and each affected unit at the source. Identify the units they own and/or operate by boiler ID# from NADP. For owners only, identify each state or local utility regulatory authority with jurisdiction over each owner

Name Jacksonville Electric Authority						<input checked="" type="checkbox"/> Owner	<input checked="" type="checkbox"/> Operator
ID# 1	ID# 2	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities Florida Dept of Environmental Regulation							

Name Florida Power and Light						<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID# 1	ID# 2	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities Florida Dept of Environmental Regulation							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
ID#	ID#	ID#	ID#	ID#	ID#	ID#	
Regulatory Authorities							

Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: New Revised

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

Plant Name	Northside Generating Station	State	FL	ORIS Code	667
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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

Compliance Plan				
a	b	c	d	e
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes			
2	Yes			
3	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

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

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.

Plant Name (from Step 1)

STEP 4
Read the standard
requirements and
certification, enter
the name of the
designated repre-
sentative, and sign
and date

Standard RequirementsPermit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain part application (including a compliance plan) 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 Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain 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 allowance 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 allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain 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 demand 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,

Plant Name (from Step 1)

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 I 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, shall 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.

(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 I of 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;

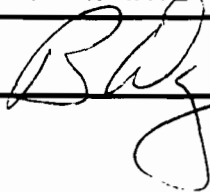
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudency review requirements under such State law;

(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 behalf 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 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 Brian M. Wirz	
Signature 	Date 12/14/95

STEP 5 (optional)
Enter the source AIRS
and FINDS identification
numbers, if known

AIRS
FINDS

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2080-0221
Expires 6-30-86



Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24

This submission is: New Revised

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

Plant Name	JEA, Northside Generating Station	State	FL	ORIS Code	667
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STEP 2
Enter requested information for the designated representative

Name	Brian M. Wirz, Associate Managing Director				
Address	Jacksonville Electric Authority 21 West Church Street Jacksonville, FL 32202				
Phone Number	(904) 632-7270	Fax Number	(904) 632-7366		

STEP 3
Enter requested information for the alternate designated representative (optional)

Name					
Address					
Phone Number			Fax Number		

STEP 4
Complete Step 5, read the certifications and sign and date

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable for the affected source and each affected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my actions, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

The agreement by which I was selected as the alternate designated representative includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

JEA, Northside Generating Station
Plant Name (from Step 1)

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.

Signature (designated representative)	<i>[Signature]</i>	Date	8/17/04
Signature (alternate)		Date	

STEP 5
Provide the name of every owner and operator of the source and each affected unit at the source. Identify the units they own and/or operate by boiler ID# from NADE. For owners only, identify each state or local utility regulatory authority with jurisdiction over each owner

Jacksonville Electric Authority						<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	1	ID#	2	ID#	3	ID#	ID#
ID#		ID#		ID#		ID#	ID#
Florida Dept. of Env. Reg.; Reg. & Env. Services Dept. (city)							
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#		ID#		ID#		ID#	ID#
ID#		ID#		ID#		ID#	ID#
Regulatory Authorities							

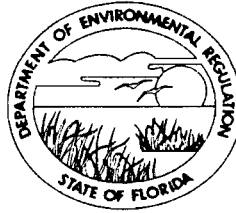
Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#		ID#		ID#		ID#	ID#
ID#		ID#		ID#		ID#	ID#
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#		ID#		ID#		ID#	ID#
ID#		ID#		ID#		ID#	ID#
Regulatory Authorities							

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

October 17, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Royce Lyles
Managing Director
Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Dear Mr. Lyles:

Enclosed are Permit Numbers AC 16-85951, AC 16-86189, and AC 16-86190, dated October 15, 1984, to Jacksonville Electric Authority, issued pursuant to Section 403, Florida Statutes.

Acceptance of these permits constitutes notice and agreement that the department will periodically review these permits for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,

C. H. Farcy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Enclosure

cc: Richard Breitmoser, Jacksonville Electric Authority
Doug Dutton, DER Northeast District
Jerry E. Woosley, Duval County Dept. of Health, Welfare,
and Bio-Environmental Services

Final Determination

Jacksonville Electric Authority
Auxiliary Boiler, Northside Station
Duval County, Florida

Permit Number
AC 16-85951

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

October 11, 1984

Response to Public Comment
Northside Station, JEA
AC 16-85951

Jacksonville Electric Authority's application for a permit to construct an auxiliary boiler at the Northside Station in Duval County, Florida has been reviewed by the Bureau of Air Quality Management (BAQM). Public notice of the Department's Intent to Issue the construction permit was published in the Florida Times Union on July 23, 1984.

JEA filed a petition for administrative hearing and submitted comments on the proposed construction permit. Their comments and DER's responses are addressed as follows:

Comment 1

JEA disagrees with Specific Condition 2 which limits fuel oil to virgin oil burned in the proposed boiler. The company's proposed wording for the condition is: "No. 6 fuel oil shall be virgin oil plus less than 5% of internally generated waste oil from known mineral oil sources such as drained lubricating oil from the permittees operating units".

Response

This comment is accepted by DER.

Comment 2

JEA objects to Specific Condition 3 which limits the fuel sulfur content to less than 1.8 and requests the SO₂ emission limit to be 1.98 pounds per million Btu heat input.

Response

This comment is not accepted by DER. The wording "sulfur content to less than 1.8% sulfur" will be changed to "not to exceed 1.8% sulfur".

Comment 3

JEA objects to Specific Condition 5 which limits the visible emission to 15% opacity.

Response

This comment is not accepted by DER. The determination of the visible emissions limit of 15% opacity is based on actual field observation of steam generators of this size and firing No. 6 fuel oil.

Comment 4

JEA objects to Specific Condition 6 which requires fuel oil analysis reports for each oil delivery.

Response

This comment is not accepted by DER.

Comment 5

JEA objects to Specific Condition 9 which requires a "complete application for an operation permit" prior to 90 days before expiration of the existing permit.

Response

DER agrees to change the expiration date of the construction permit but will retain the condition.

BESD's comments to the public notice is attached. Their comments are in agreement with DER's responses.

The final action by the department will be to issue the permit with the changes on Specific Conditions 2, 3, and 9 in the Final Determination.

21/16/84

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Permit Number: AC 16-85951

Expiration Date: July 31, 1985

County: Duval

Latitude/Longitude: 30° 25' 04" N/
81° 33' 09" W

Project: Oil/Gas Fired Auxiliary
Boiler, 120 MMBtu/hr

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. 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 department and made a part hereof and specifically described as follows:

For the construction of an oil (or L.P. gas in the future) fired auxiliary boiler at the JEA's Northside Station located in Jacksonville, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted on pages 5 and 6, Specific Conditions.

Attachments:

1. Application to construct Air Pollution Sources, DER Form 17-1.122(16), received on April 20, 1984.
2. DER's incompleteness letter, dated May 14, 1984.
3. JEA's response to incompleteness letter, received on May 16, 1984.
4. A BACT determination made by DER.
5. BESD's comments to the public notice, received on August 31, 1984.
6. JEA's comments to the public notice, received on August 10, 1984.
7. Final Order, dated October 9, 1984, dismissing petition for administrative hearing.

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: July 31, 1985

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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 the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: July 31, 1985

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably 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 notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:

Jacksonville Electric Authority

I. D. Number:

Permit Number: AC 16-85951

Expiration Date: July 31, 1985

GENERAL CONDITIONS:

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 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: July 31, 1985

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - 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 that 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Except as required pursuant to DER's BACT determination (attachment 4) and these specific conditions, the proposed boiler construction shall be carried out in accordance with the statements in the application submitted by the permittee.

2. The proposed boiler shall be used only as an auxiliary unit and is allowed to fire new oil (No. 2 or No. 6), L.P. gas, or new oil blended with internally generated waste oil which does not contain any (zero percent) polychlorinated biphenyls (PCBs). Records of internally generated waste oil use shall be kept on an annual basis.

monthly

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: July 31, 1985

SPECIFIC CONDITIONS:

3. The sulfur content of the new or blended oil burning in the proposed boiler shall not exceed 1.8 percent by weight as determined by ASTM Method D-219. The fuel analysis reports of blended oils shall be recorded for inspection.

4. The boiler shall be operational only when at least one of the three larger (+ 2000-E6 Btu/hr) steam generating units has been shut down or is in the start-up mode of operation prior to being put on line. Compliance shall be determined by requiring that when any of boilers NS#1, NS#2, and NS#3 are shut down, that it be recorded in the proposed boiler operating log. When electrical power demand requires all three main units to be on line, the total station residual fuel consumption will be recorded for each four hour period whenever the auxiliary steam generator is operating. The total station fuel consumption must not exceed 1,440,000 pounds in any consecutive three (3) hour period. The recorded fuel consumption data will be retained for at least two years.

5. The visible emissions from the proposed boiler shall not be greater than 15% opacity with up to 40% opacity allowed for not more than two minutes in any one hour. DER Method 9 (17-2.700(6)(a)9, FAC) shall be used for the performance test conducted by the permittee.

6. The permittee shall submit all fuel oil analyses (every oil delivery needs a fuel analysis) with the required visible emissions test to DER's Northeast District and Jacksonville Bio-Environmental Services Division (BESD) annually.

7. The test of visible emissions shall be accomplished at 90% to 100% of the design capacity. The permittee shall notify DER's Northeast District and the BESD office 14 days prior to source testing.

8. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating or spraying roads and the construction area, shall be taken by the permittee.

9. A complete operation permit application with all compliance tests and data shall be submitted to the BESD office 90 days prior to expiration of the construction permit.

PERMITTEE:

Jacksonville Electric Authority

I. D. Number:

Permit Number: AC 16-85951

Expiration Date: July 31, 1985

SPECIFIC CONDITIONS:

Issued this 15th day of oct, 1984

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Terry Cole for
VICTORIA J. TSCHINKEL, Secretary

 pages attached.

Best Available Control Technology (BACT) Determination
Jacksonville Electric Authority
Duval County

The applicant plans to install an auxiliary fossil-fuel-fired steam generator at the Northside generating station. The proposed unit will have a design heat input of 116.5 million Btu/hr and fire residual or distillate oil. The primary function of this unit will be to supply inplant steam requirements, especially during the colder months of the year, and will not be used as a peaking unit.

The proposed auxiliary boiler will operate only when one or more of the larger steam generating units is down or in the startup mode, therefore there will be no additional increase in sulfur dioxide or particulate emissions to the atmosphere.

The boiler will be located within the area of influence of the Jacksonville particulate nonattainment area (Rule 17-2.410(2)2.).

BACT Determination Requested by the Applicant:

The particulate and sulfur dioxide emissions will be 0.1 and 1.98 pounds per million Btu of heat input, respectively. The proposed steam generator will operate only when one of the larger main units is down or in a startup mode.

Date of Receipt of a BACT application:

April 24, 1984

Date of Publication in the Florida Administrative Weekly:

May 4, 1984

Review Group Members:

The determination was based upon comments received from the New Source Review Section, Air Modeling Section and Jacksonville Division of Bio-Environmental Services.

BACT Determined by DER:

Particulate and sulfur dioxide emissions to be limited by the following two permit conditions:

1. This steam generating unit shall be used only as an auxiliary system and shall fire New [1] or New oil blended with internally generated waste oil [2], and having a sulfur content, by weight, not to exceed 1.8% as determined by ASTM method D-219.

2. The auxiliary steam generating unit shall be operational when one of the three larger (+ 2000-E6 Btu/hr) steam generating units has been shut down or in the start-up mode of operation prior to being put on line.

[1] The term "new" means an oil which has been refined from crude oil and has not been used, and which may or may not contain additives.

[2] Internally generated waste oil is defined as: 1) automotive waste oils consisting of crankcase drainage, transmission fluids, gear lubricants, hydraulic oils, and minor amounts of kerosene and other solvents used in servicing equipment and, 2) industrial waste oils used in metal working, lubrication of industrial equipment, hydraulic and circulating systems, diesel engines and turbine lubrication and, 3) waste oils which have been used in transformers and heat transfer equipment that does not contain any (zero percent) polychlorinated biphenyls (PCBs).

Compliance shall be determined by requiring that whenever a main steam generator is down, the inactive source, NS #1, NS #2, or NS #3, is to be recorded in the auxiliary steam generator operating log. When electrical power demand requires all three main units to be on line, the total station residual fuel consumption will be recorded for each four hour period whenever the auxiliary steam generator is operating. The total station fuel consumption must not exceed 1,440,000 pounds in any consecutive three (3) hour period. The recorded fuel consumption data will be retained for at least two years.

Visible Emissions

Not to exceed 15% opacity.
40% opacity is permitted for not more than two minutes in any one hour.

DER Method 9 (17-2.700(6)(a)9, FAC) will be used to determine compliance with the opacity standard.

BACT Determination Rationale:

The applicant will shut down one of the larger +2000-E6 Btu/hr steam generators whenever the new 116.5-E6 unit is in operation or in startup mode. The new unit, therefore, would not increase particulate or sulfur dioxide emissions to the atmosphere. The applicant has proposed this scenario as BACT.

The applicant further contends that since the new boiler would only supply steam for inplant use, for example, to keep the generating station available for winter start-ups, this proposed BACT is reasonable.

The new boiler would:

- 1) operate below design capacity the majority of the time and only when one of the larger boilers is down or in start up mode
- 2) operate near design capacity primarily during the winter months, when electric power demand is low, and the main units are on standby
- 3) have installed state-of-the-art combustion controllers to minimize NO_x emissions, and
- 4) result in emissions considered minor as compared to the main units.

The department agrees that operation of the auxiliary boiler as per the proposed scenario is BACT. Particulate and sulfur dioxide emissions, when firing fuel oil, are related to the fuel sulfur content. Fuel oil containing less than 1.5% sulfur, by weight, is a SO₂ control option for a boiler of this size. The main units fire 1.8% sulfur content oil and the department does not believe a requirement for separate fuel oil storage for a lower sulfur content fuel is justified.

The fuel sulfur content was determined to be the BACT to control particulate matter and SO₂ emissions for the following reasons.

A. The cover letter attached to JEA's air permit application stated, "No. 6 fuel oil, less than 1.8% sulfur, is the only fuel presently available for boiler operation at the Northside station." (emphasis added). JEA has not submitted data indicating a higher sulfur content fuel will be fired.

B. The BACT economic review indicated that low sulfur fuel, as a method to control SO₂ emissions, was the cheaper alternative for a boiler of this size when compared to various wet or dry FGD systems.

C. Compliance with the permit conditions will require the taking of a spot fuel sample and the sulfur content determined by ASTM analysis Method D-219 at a cost of approximately \$50. The energy basis SO₂ standard requested by JEA would require a stack test. A normal test probe could not be used due to the low gas velocity in the stack (less than 10 FPS) and special stack testing procedures would have to be used. The cost would be much greater than a fuel sample analysis.

D. A fuel oil sample can be obtained quickly and easily. Compliance can be determined at any time without elaborate preparations and at a reasonable cost.

As mentioned in the overview, a BACT determination is required as set forth in Rule 17-2.600(6). Rule 17-2.100(23) requires a visible emission limit in all BACT determinations. Since the 15% opacity limit is more stringent than the 20% in Rule 17-2.600(6)(a), the more stringent limit applies.

The visible emissions limit of 15% opacity is based on actual field observation of steam generators of this size when firing No. 6 oil. JEA has not submitted any data indicating why the proposed steam generators could not meet the 15% opacity limit.

Air modeling indicates the proposed source, operating as per the scenario determined as BACT, will not impact the nonattainment area, therefore only a BACT determination is required for this source as set forth in the Florida Administrative Code Rule 17-2.600(6) - Emission Limiting and Performance Standards.

The "new" oil requirement disallows the use of waste oil which could contain sham blended RCRA compounds, or other non-fossil fuels, emissions from which were not considered in this BACT analysis.

Details of the Analysis may be Obtained by Contacting:

Edward Palagyi, BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Recommended By:

CAA Jancy

C. H. Fancy, Deputy Bureau Chief

Date: 10/15/84

Approved:

Terry Cole for

Victoria J. Tschinkel, Secretary

Date: 10/15/84

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources (cont'd)

II. Application logging.

ARMS Permit Number assigned 0310046-001-AV
logged into ARMS by initials J.H. date 7/19/96

III. Initial distribution of application.

a. Disposition of 4 paper/electronic copies submitted:

- 1- Clean originals to file? Y___ N___
- 1- ___ District Y___ N___
- 1- _____ County [affected local program]? Y___ N___
- 1- Permit engineer(s) _____, _____

b. Disposition of electronic files submitted:

copy placed onto PC? Y___ N___

c. Disposition of ELSA submitted:

version used [circle]: 1.0 1.1 1.2.1 1.3 1.3a 1.3b

Uploaded to EARS? Y___ N___

by _____ date ___/___/___

d. Electronic information submitted previewed? Y___ N___ N/A___

Comment(s): _____

{this checklist was developed from Rule 62-213.420(1)(b)2., F.A.C. and DARM policy}

(FOR INTERNAL USE ONLY)

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources

Facility Owner/Operator Name: Jacksonville Electric Authority
Facility ID No.: 0310046 Site Name: Southside Generating Station
County: Duval
application receipt date 06/14/96

I. Preliminary scanning of application submitted.

- a. Was application submitted to correct permitting authority? Y N
- b. Was an application filed? Y* N
- c. Was the application filed timely? Y* N

- d. Application format filed [check one].
Hard copy of official version of form? ELSA?
A facsimile of official version of form? Some combination?
03/21/96

- e. 4 copies (paper/electronic) submitted? Y N

- f. Electronic diskettes protected/virus scanned/marked? Y N N/A
by _____ date ___/___/___

- g. Entire hard copy of Section I. provided (Pages 1-8 of form)? Y N
Facility identified (Page 1)? [if not complete a Page 1] Y* [Attached
R.O. certification signed and dated (Page 2)? Y* N
P.E. certification signed and dated (Page 7)? Y* N

- h. Any confidential information submitted? Y N
If yes, R.O. provided hard copy to us and EPA? Y* N
If yes, hard copy locked up and note filed with application? Y* N

- i. Type of application filed.
TV application for 'existing' Title V Source only? Y N
Any units subject to acid rain? Y N

Note(s): [*] = mandatory.

Comment(s): _____

Reviewer's initials AS date 06/14/96 Concurrence initials _____ date ___/___/___

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources

Facility Owner/Operator Name: Jacksonville Electric Authority
 Facility ID No.: 03100045 Site Name: Northside Generating Station
 County: Duval St. Johns River Power Park
 application receipt date 06/14/96

IT#6V
Source

I. Preliminary scanning of application submitted.

- a. Was application submitted to correct permitting authority? Y N
- b. Was an application filed? Y* N
- c. Was the application filed timely? Y* N
- d. Application format filed [check one].
 Hard copy of official version of form? ELSA?
 A facsimile of official version of form? Some combination?
03/21/96
- e. 4 copies (paper/electronic) submitted? Y N
- f. Electronic diskettes protected/virus scanned/marked? Y N N/A
 by _____ date ___/___/___
- g. Entire hard copy of Section I. provided (Pages 1-8 of form)? Y N
 Facility identified (Page 1)? [if not complete a Page 1] Y* [Attached
 R.O. certification signed and dated (Page 2)? Y* N
 P.E. certification signed and dated (Page 7)? Y* N
- h. Any confidential information submitted? Y N
 If yes, R.O. provided hard copy to us and EPA? Y* N
 If yes, hard copy locked up and note filed with application? Y* N
- i. Type of application filed.
 TV application for 'existing' Title V Source only? Y N
 Any units subject to acid rain? Y N

Note(s): [*] = mandatory.

Comment(s): _____

Reviewer's initials SS date 06/14/96 Concurrence initials _____ date ___/___/___

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources (cont'd)

II. Application logging.

ARMS Permit Number assigned 0310045-001-AV
logged into ARMS by initials J.H. date 7/29/96

III. Initial distribution of application.

a. Disposition of 4 paper/electronic copies submitted:

1- Clean originals to file? Y___ N___

1- ___ District Y___ N___

1- ___ County [affected local program]? Y___ N___

1- Permit engineer(s) _____, _____

b. Disposition of electronic files submitted:

copy placed onto PC? Y___ N___

c. Disposition of ELSA submitted:

version used [circle]: 1.0 1.1 1.2.1 1.3 1.3a 1.3b

Uploaded to EARS? Y___ N___

by _____ date ___/___/___

d. Electronic information submitted previewed? Y___ N___ N/A___

Comment(s): _____

{this checklist was developed from Rule 62-213.420(1)(b)2., F.A.C. and DARM policy}