

# JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



August 12, 1997

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

**RECEIVED**

**AUG 13 1997**

**BUREAU OF  
AIR REGULATION**

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.

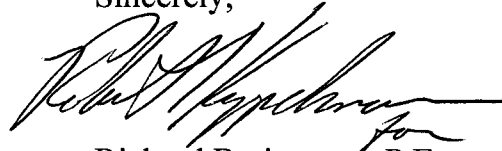
Also, the Southside Generating Station currently has no emergency generators while the Kennedy Generating Station has two black-start generators and one emergency generator. These generators operate very infrequently and qualify for the insignificant activity exemption.

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.

Mr. Mitchell  
August 12, 1997  
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 read "Richard Breitmoser". The signature is fluid and cursive, with a long horizontal stroke at the end.

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

RB/NBG

bc: G. Connell (w/o Atta.)  
R. Kappelmann ( " )  
S. Stokes ( " )  
B. Gianazza  
Files 4.2.1  
4.4.1

TVADDIT

**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):  Propane used as ignitor fuel	
2. Source Classification Code (SCC): 1-01-011-02	
3. SCC Units: kgal	
4. Maximum Hourly Rate: N/A	5. Maximum Annual Rate: N/A
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: 84	
10. Segment Comment (limit to 200 characters):	

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):  Propane used as ignitor fuel	
2. Source Classification Code (SCC): 1-01-011-02	
3. SCC Units: kgal	
4. Maximum Hourly Rate: N/A	5. Maximum Annual Rate: N/A
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: 84	
10. Segment Comment (limit to 200 characters):	

**Emissions Unit Information Section \_\_\_\_\_ of \_\_\_\_\_**

**Segment Description and Rate: Segment \_\_\_\_\_ of \_\_\_\_\_**

1. <b>Segment Description (Process/Fuel Type and Associated Operating Method/Mode)</b> (limit to 500 characters):  Propane used as ignitor fuel	
2. <b>Source Classification Code (SCC):</b> 1-01-011-02	
3. <b>SCC Units:</b> kgal	
4. <b>Maximum Hourly Rate:</b> N/A	5. <b>Maximum Annual Rate:</b> N/A
6. <b>Estimated Annual Activity Factor:</b> N/A	
7. <b>Maximum Percent Sulfur:</b> N/A	8. <b>Maximum Percent Ash:</b> N/A
9. <b>Million Btu per SCC Unit:</b> 84	
10. <b>Segment Comment (limit to 200 characters):</b>	

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):  Propane used as ignitor fuel	
2. Source Classification Code (SCC): 1-01-011-02	
3. SCC Units: kgal	
4. Maximum Hourly Rate: N/A	5. Maximum Annual Rate: N/A
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: 84	
10. Segment Comment (limit to 200 characters):	

Emissions Unit Information Section \_\_\_\_\_ of \_\_\_\_\_

**Segment Description and Rate:** Segment \_\_\_\_\_ of \_\_\_\_\_

<b>1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode)</b> (limit to 500 characters):  Propane used as ignitor fuel	
<b>2. Source Classification Code (SCC):</b> 1-01-011-02	
<b>3. SCC Units:</b> kgal	
<b>4. Maximum Hourly Rate:</b> N/A	<b>5. Maximum Annual Rate:</b> N/A
<b>6. Estimated Annual Activity Factor:</b> N/A	
<b>7. Maximum Percent Sulfur:</b> N/A	<b>8. Maximum Percent Ash:</b> N/A
<b>9. Million Btu per SCC Unit:</b> 84	
<b>10. Segment Comment (limit to 200 characters):</b>	



**Emissions Unit Information Section \_\_\_\_\_ of \_\_\_\_\_**

**Segment Description and Fuel Segment \_\_\_\_\_ of \_\_\_\_\_**

<b>1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode)</b> (limit to 500 characters):  Propane used as ignitor fuel	
<b>2. Source Classification Code (SCC):</b> 1-01-011-02	
<b>3. SCC Units:</b> kgal	
<b>4. Maximum Hourly Rate:</b> N/A	<b>5. Maximum Annual Rate:</b> N/A
<b>6. Estimated Annual Activity Factor:</b> N/A	
<b>7. Maximum Percent Sulfur:</b> N/A	<b>8. Maximum Percent Ash:</b> N/A
<b>9. Million Btu per SCC Unit:</b> 84	
<b>10. Segment Comment (limit to 200 characters):</b>  (This area is currently blank)	

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):  Propane used as ignitor fuel	
2. Source Classification Code (SCC): 1-01-011-02	
3. SCC Units: kgal	
4. Maximum Hourly Rate: N/A	5. Maximum Annual Rate: N/A
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: 84	
10. Segment Comment (limit to 200 characters):	

**Emissions Unit Information Section \_\_\_\_\_ of \_\_\_\_\_**

**Segment Description and Rate: Segment \_\_\_\_\_ of \_\_\_\_\_**

1. <b>Segment Description (Process/Fuel Type and Associated Operating Method/Mode)</b> (limit to 500 characters):  Propane used as ignitor fuel	
2. <b>Source Classification Code (SCC):</b> 1-01-011-02	
3. <b>SCC Units:</b> kgal	
4. <b>Maximum Hourly Rate:</b> N/A	5. <b>Maximum Annual Rate:</b> N/A
6. <b>Estimated Annual Activity Factor:</b> N/A	
7. <b>Maximum Percent Sulfur:</b> N/A	8. <b>Maximum Percent Ash:</b> N/A
9. <b>Million Btu per SCC Unit:</b> 84	
10. <b>Segment Comment (limit to 200 characters):</b>	

**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):  Propane used as ignitor fuel	
2. Source Classification Code (SCC): 1-01-011-02	
3. SCC Units: kgal	
4. Maximum Hourly Rate: N/A	5. Maximum Annual Rate: N/A
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: 84	
10. Segment Comment (limit to 200 characters):	

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):  Propane used as ignitor fuel	
2. Source Classification Code (SCC): 1-01-011-02	
3. SCC Units: kgal	
4. Maximum Hourly Rate: N/A	5. Maximum Annual Rate: N/A
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: 84	
10. Segment Comment (limit to 200 characters):	

## JACKSONVILLE ELECTRIC AUTHORITY

### OPERATION AND MAINTENANCE PLAN

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

#### Daily as needed:

1. Clean one deck of burners (renew tips as necessary).
2. Conduct one complete soot-blowing cycle (or as needed).
3. Maintain optimum fuel oil temperature and pressure.

#### Weekly as needed:

1. Clean fuel oil strainers (more frequently if required).

#### Annually as needed:

1. Clean the boiler and inspect baffles.
2. Inspect the: (a) wind box;  
(b) registers;  
(c) diffusers;  
(d) refractory throat.
3. Adjust the air registers for optimum flame pattern (more frequently if required).
4. Replace burner tips (more frequently if required).

#### 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 every four hours:

1. Steam flow;
2. Number of burners in service;
3. Burner oil pressure;
4. 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 two years.

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



September 3, 1997

**RECEIVED**

SEP 19 1997

BUREAU OF  
AIR REGULATION

Mr. Scott M. Sheplak, P.E.  
Department of Environmental Protection  
Bureau of Air Regulation  
111 South Magnolia Drive, Suite 4  
Tallahassee, FL 32301

**RE: Draft Title V Operation Permit  
Jacksonville Electric Authority - Southside Generating Station  
Title V Operation Permit No.: 0310046-001-AV**

Dear Mr. Sheplak:

The City of Jacksonville, Regulatory and Environmental Services Department, Air and Water Quality Division (AWQD) has reviewed the above referenced draft Title V Permit and submit the following comments.

1. The Jacksonville Environmental Protection Board (JEPB) Rule 2, Air Pollution Control, attached, was amended effective December 16, 1996. All references to JEPB Rule 2, should be corrected to the current citations.
2. Section II. Facility-wide Conditions should be corrected as follows:

**From:** 3. **Not federally enforceable. Odor Nuisance.** Pursuant to Jacksonville Ordinance Code (JOC) Chapter 376.110, any facility that causes or contributes to the emission of objectionable odors which results in the City of Jacksonville Air and Water Quality Division (AWQD) receiving and validating complaints from five (5) or more different households within a 90 day period and can be cited for objectionable odors.  
[JOC Chapter 376.100]

**To:** 3. **Not federally enforceable. Odor Nuisance.** Pursuant to Jacksonville Ordinance Code (JOC) Chapter 376, any facility that causes or contributes to the emission of objectionable odors which results in the City of Jacksonville Air and Water Quality Division (AWQD) receiving and validating complaints from five (5) or more different households within a 90 day period can be cited for objectionable odors.  
[JOC Chapter 376]



421 West Church Street - Suite 422  
Jacksonville, Florida 32202-4111

**Air Quality** 630-3484  
**Water Quality** 630-3461  
**Ground Water** 630-4900  
**Hazardous Materials** 630-3404



Mr. Scott M. Sheplak, P.E.  
Department of Environmental Protection  
Bureau of Air Regulation  
September 3, 1997  
Page 2

**Add: 11. Not federally enforceable.** The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 85-1 [Final Rules with Respect to Organization, Procedures, and Practice].

**Add: 12. Not federally enforceable.** The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIII.

3. Section III. Emission Units., Subsection A, Specific Condition A.3. - This condition prohibits the use of used oil containing PCBs above the detectable level for startup or shutdown. AWQD requests clarification of detectable level. Is there a specific test method with a specified detectable limit or range? Or, does this Specific Condition prohibit the use of any PCB containing oil for the purpose of startup or shutdown? If the latter is correct, the Specific Condition should read: Used oil containing any PCBs shall not be used for startup or shutdown.

Please address any comments to Mr. Ronald L. Roberson at (904) 630-3484.

Very truly yours,



Richard L. Roberson, P.E., Manager  
Air Pollution Permitting Section

RLR/RR/ecr

Attachment

c: Mr. Bruce Mitchell, FDEP/Talla.  
Mr. Chris Kirts, P.E., FDEP/NED  
AWQD File 1690 - A  
AWQD Permitting File

# JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



**RECEIVED**

NOV 10 1997

BUREAU OF  
AIR REGULATION

November 5, 1997

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  
Title V Permit Application - Supplemental Information  
Addition of Microturbine to List of Exempt Sources

Dear Mr. Mitchell:

The purpose of this letter is to request the addition of the subject microturbine to the Southside Generating Station Appendix E1 as an exempt source pursuant to FAC 213-430(6).

Per our conversations with regard to this matter, below is the information you requested on the microturbine.

Manufacturer: Elliot Energy Systems  
Model: TA-45  
Output: approx. 42 kw  
Fuel type: natural gas  
Firing rate: approx. 1.07 mmBtu/hr (approx. 0.643 mmBtu/hr with recuperator)  
NOx emission rate: estimated at 1.5 lb/day

The unit will be evaluated for a period of about one year at the Southside Generating Station to determine what applications this type of unit may serve in the JEA system. At that time the unit will be removed and a notification letter will be sent to the Department.

November 5, 1997  
Mr. Mitchell  
Page Two

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

Sincerely,



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

NBG

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

11/16/97 cc: Bruce Mitchell

Memorandum

Florida Department of  
Environmental Protection

TO: Mr. Walter P. Brussels, Managing Director, JEA  
Mr. Brian M. Wirz, Designated Representative, JEA  
Mr. Richard Robinson, AWQD  
Mr. Richard Breitmoser, P.E., JEA  
Mr. Bert Gianazza, Applicant Contact, JEA

THRU: Scott M. Sheplak, P.E., Title V Section

FROM: Bruce Mitchell

DATE: July 18, 1997

SUBJECT: Replacement Pages Regarding the DRAFT Title V Operation Permit  
Jacksonville Electric Authority - Southside Generating Station  
Title V Operation Permit No.: 0310046-001-TV

Based on a review of Table 1-1, a typo was found on Boiler #5 for SO2 emissions. The original table listed the equivalent TPY as 5,086.4 and should have been 7,227.0. Please replace the enclosed page with the appropriate page in the DRAFT permit package that was mailed to you on the 10th.

If there are any questions, please give me a call @ (850)488-1344 or SC: 278-1344.

/bm

Enclosures

Bruce  
Ready File } 7-18-97  
Scott

**Table 1-1, Summary of Air Pollutant Standards and Terms**

Jacksonville Electric Authority  
Southside Generating Station

**DRAFT Permit No.:** 0310046-001-AV  
**Facility ID No.:** 0310046

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions *		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
-004	Boiler #4 (796 MMBtu/hr) (825 MMBtu/hr) <b>Acid Rain Phase II Unit</b>  (75.0 MW Turbine-generator)	VE	No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
			Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
		PM	No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	79.6	348.7	62-296.405(1)(b)	A.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	82.5	361.4	62-296.405(1)(b)	A.7.
		PM - SB **	No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	238.8	435.8	62-210.700(3)	A.8.
			Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	247.5	451.7	62-210.700(3)	A.8.
SO <sub>2</sub>	No. 6 F.O.	8760	1.10 lb/MMBtu	N/A	N/A	875.6	3,835.1	62-296.405(1)(c)1.b.	A.9.		
	Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
% Sulfur	No. 6 F.O.	8760	max. sulfur content 1.0 %, by wt.			875.6	3,835.1	Applicant Request	A.10.		
-005	Boiler #5 (1500 MMBtu/hr) (1550 MMBtu/hr) <b>Acid Rain Phase II Unit</b>  (156.6 MW Turbine-generator)	VE	No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
			Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
		PM	No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	150.0	657.0	62-296.405(1)(b)	A.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	155.0	678.9	62-296.405(1)(b)	A.7.
		PM - SB **	No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	450.0	821.3	62-210.700(3)	A.8.
			Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	465.0	848.6	62-210.700(3)	A.8.
SO <sub>2</sub>	No. 6 F.O.	8760	1.10 lb/MMBtu	N/A	N/A	1,650.0	7,227.0	62-296.405(1)(c)1.b.	A.9.		
	Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
% Sulfur	No. 6 F.O.	8760	max. sulfur content 1.0%, by wt.			1,650.0	7,227.0	Applicant Request	A.10.		
-010	Auxiliary Boiler #1 (21.0 MMBtu/hr)	VE	No. 2 F.O.	8760	15%; 40% - 1 two min. period/hr.			N/A	N/A	AC16-86190	B.5. & B.6.
			Natural Gas	8760	15%; 40% - 1 two min. period/hr.			N/A	N/A	AC16-86190	B.5. & B.6.
		% Sulfur	No. 2 F.O.	8760	max. sulfur content 0.5%, by wt.			97.4	340.6	AC16-86190	B.8.
		SO <sub>2</sub>	Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Notes:**

\* The "Equivalent Emissions" listed are for informational purposes.

\*\* PM - SB refers to "soot blowing" and "load change".

[electronic file name: 03100461.xls]

Department of  
Environmental Protection

DEP ROUTING AND TRANSMITTAL SLIP	
TO: (NAME, OFFICE LOCATION) 3. _____	
1. Bert CianaZZa	4. _____
2. JEA	5. _____
<p>PLEASE PREPARE REPLY FOR:</p> <p>____ SECRETARY'S SIGNATURE</p> <p>____ DIV/DIST DIR SIGNATURE</p> <p>____ MY SIGNATURE</p> <p>____ YOUR SIGNATURE</p> <p>____ DUE DATE _____</p> <p>ACTION/DISPOSITION</p> <p>____ DISCUSS WITH ME</p> <p>____ COMMENTS/ADVISE</p> <p>____ REVIEW AND RETURN</p> <p>____ SET UP MEETING</p> <p>____ FOR YOUR INFORMATION</p> <p>____ HANDLE APPROPRIATELY</p> <p>____ INITIAL AND FORWARD</p> <p>____ SHARE WITH STAFF</p> <p>____ FOR YOUR FILES</p>	<p>COMMENTS:</p> <p>Dear Bert,</p> <p>Please replace the enclosed/attached page with the original. This will be the last change that I plan to make on this package before you place it on public notice, unless you find something that just has to be <sup>changed</sup> made. If something does require a comment from you, then I'll address it in the PROPOSED permit determination and make the appropriate change(s).</p> <p>Thanks, Bum</p>
FROM: _____	DATE: 2-18-97 PHONE: 850/488-1344

ration Permit  
g Station

\$5 for SO2 emissions. The  
en 7,227.0. Please replace  
package that was mailed to

344 or SC: 278-1344.

Florida Department of  
**Environmental Protection**

**Memorandum**

TO: Mr. Walter P. Brussels, Managing Director, JEA  
Mr. Brian M. Wirz, Designated Representative, JEA  
Mr. Richard Robinson, AWQD  
Mr. Richard Breitmoser, P.E., JEA  
Mr. Bert Gianazza, Applicant Contact, JEA

THRU: Scott M. Sheplak, P.E., Title V Section *sm*

FROM: Bruce Mitchell *BM*

DATE: July 17, 1997

SUBJECT: Replacement Pages Regarding the DRAFT Title V Operation Permit  
Jacksonville Electric Authority - Southside Generating Station  
Title V Operation Permit No.: 0310046-001-TV

Based on a review of the Acid Rain Part, some edits seemed appropriate and have been made to the document previously issued. Please replace the enclosed pages with the appropriate pages in the DRAFT permit package that was mailed to you on the 10th.

If there are any questions, please give me a call @ (850)488-1344 or SC: 278-1344.

/bm

Enclosures

7/17 - cc: Bruce m.  
Reading File

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

**Operated by: Jacksonville Electric Authority**  
**ORIS code: 0668**

**Subsection A. This subsection addresses Acid Rain, Phase II.**

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

**E.U.**

**ID No.    Brief Description**

- 001    Boiler No. 1 (reported retired to DOE as of 1994)
- 002    Boiler No. 2 (reported retired to DOE as of 1994)
- 003    Boiler No. 3 (air permit surrendered to the Department 5/14/97 by letter)
- 004    Boiler No. 4 (nominal 75.0 MW electric steam generator)
- 005    Boiler No. 5 (nominal 156.6 MW electric steam generator)

**A.1.** The Phase II permit application(s) submitted for this facility, as approved by the Department, are a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

- a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.  
 [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

**A.2.** Sulfur dioxide (SO<sub>2</sub>) allowance allocations and nitrogen oxide (NO<sub>x</sub>) requirements for each Acid Rain unit are as follows:

<u>E.U. ID No.</u>	<u>EPA ID</u>	<u>Year</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
-001	1	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	923*	923*	923*
-002	2	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	954*	954*	954*
-003	3	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	223*	223*	223*



-004	4	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	610*	610*	610*
-005	5	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	1797*	1797*	1797*

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

A.3. Comments, notes, and justifications: none.

REGULATORY & ENVIRONMENTAL SERVICES DEPARTMENT

FAX COVER SHEET

OFFICE OF THE DIRECTOR

421 West Church Street, Suite 412
Jacksonville, Florida 32202
(904)630-3662 (OFFICE)
(904)630-3638 (FAX)

DATE: 7/16/97 TIME: 9:15 a

TO: BRUCE MITCHELL FAX #: (904) 922-6979
FDEP

MESSAGE: O & M PLAN FOR JEA KENNEDY STATION

FROM: RON ROBERSON

NUMBER OF PAGES FAXED (including cover): 3

PLEASE CALL (904)630-3662 IF YOU DO NOT RECEIVE ALL THE PAGES OF THIS FAX OR IF TRANSMISSION IS UNCLEAR. OUR FAX NUMBER IS (904)630-3638.

JACKSONVILLE ELECTRIC AUTHORITY

OPERATION AND MAINTENANCE PLAN  
FOR SS #4 & 5 WHEN BURNING GAS

Following is a list of activities required for the control of emissions from JEA gas fired generating units. Previous O & M procedures shall apply during oil firing periods.

Daily:

1. Visually check individual burner flame patterns and adjust register as necessary.
2. Maintain optimum fuel/air ratios.

Annually (or as necessary):

1. Clean the boiler and inspect baffles.
2. Inspect the: (a) wind box;  
(b) register;  
(c) diffusers;  
(d) refractory throat.
3. Adjust the air registers for optimum flame pattern.
4. Inspect burner heads and clean or replace as necessary.

Major Outages:

1. Calibrate the: (a) flow meters including sensing line checks;  
(b) pneumatic controls  
(c) temperature gauges.

Performance Parameters

The following operating records shall be maintained:

1. Steam flow;
2. Fuel flows;
3. Air flow;

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 two years.

April 11, 1984  
Revised May 7, 1985

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 two years.

Memorandum

Florida Department of  
Environmental Protection

TO: Mr. Walter P. Brussels, Managing Director, JEA  
Mr. Brian M. Wirz, Designated Representative, JEA  
Mr. James L. Manning, AWQD  
Mr. Richard Breitmoser, P.E., JEA  
Mr. Bert Gianazza, Applicant Contact, JEA

THRU: Scott M. Sheplak, P.E., Title V Section *sm*

FROM: Bruce Mitchell *BM*

DATE: July 14, 1997

SUBJECT: Replacement Pages Regarding the DRAFT Title V Operation Permit  
Jacksonville Electric Authority - Southside Generating Station  
Title V Operation Permit No.: 0310046-001-TV

Based on a phone conversation with Bert Gianazza this morning, it was decided to change the classification of the "emergency generator" from Uregulated to Exempt. Please replace the enclosed pages with the appropriate pages in the DRAFT permit package that was mailed to you on the 10th.

If there are any questions, please give me a call @ (850)488-1344 or SC: 278-1344.

/bm

Enclosures

7/14 - cc: Bruce M -  
leading file

**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of two boilers, Nos. 4 and 5, and an auxiliary boiler, No. 1. The auxiliary boiler is allowed to operate when one of the boilers (No. 4 or No. 5) is under standby status. There are no air pollution controls associated with the boilers. Boilers Nos. 4 and 5 fire natural gas and/or No. 6 fuel oil and the auxiliary boiler fires natural gas and/or No. 2 fuel oil. There is a fuel oil storage tank farm associated with the boilers. Also, included in this permit are miscellaneous unregulated/exempt emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).**

**E.U.**

<b><u>ID No.</u></b>	<b><u>Brief Description</u></b>
-004	Boiler No. 4
-005	Boiler No. 5
-010	Auxiliary Boiler No. 1

**Unregulated Emissions Units and/or Activities**

-008	Storage Tanks (tanks 1-4)
-xxx	Storage Tanks (tanks 5-6)

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

**Subsection C. Relevant Documents.**

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

**These documents are provided to the permittee for information purposes only:**

Table 1-1, Summary of Air Pollutant Standards and Terms  
Table 2-1, Summary of Compliance Requirements  
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers  
Appendix H-1, Permit History/ID Number Changes

**These documents are on file with the permitting authority:**

Initial Title V Permit Application received June 14, 1996.  
Mr. Richard Breitmoser's letter to Mr. Robert Leetch dated May 14, 1997.  
Supplementary Information Received January 9, 1997.

## Appendix E-1, List of Exempt Emissions Units and/or Activities.

Jacksonville Electric Authority  
Southside Generating Station

DRAFT Permit No.: 0310046-001-AV

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Full Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., are also exempt from the permitting requirements of Chapter 62-213, F.A.C., provided such emissions units and activities also meet the exemption criteria of Rule 62-213.430(6)(b), F.A.C. The below listed emissions units and/or activities are hereby exempt pursuant to Rule 62-213.430(6), F.A.C.

### Brief Description of Emissions Units and/or Activities:

#### A. Storage Tanks.

1. JEA Tank #7	Magnesium Oxide	16,000 gallons
2. JEA Tank #8	Lube Oil	3,300 gallons
3. JEA Tank #9	Lube Oil	4,800 gallons
4. JEA Tank #10	Lube Oil	10,000 gallons
5. JEA Tank #11	Mineral Oil Static Tank	6,600 gallons
6. JEA Tank #12	Mineral Acid	10,000 gallons
7. JEA Tank #13	Caustic	10,000 gallons
8. JEA Tanks #14	Hypochloride	12,000 gallons
	Hypochloride	10,000 gallons
9. JEA Tank #15	Sodium BiSulfite	3,900 gallons
10. JEA Tank #16	Hypochloride	6,000 gallons

#### B. Boilers Nos. 4 and 5.

1. Evaporation of on-site generated boiler non-hazardous cleaning chemicals (cirtosolv and ammonia). This activity occurs once every three to five years or longer.

#### C. Emergency Generator.

1. One at this site. The emergency generator has historically fired less than 10,000 gallons per year of diesel fuel. The emergency generator draws its fuel from a single diesel fuel oil storage tank that supports the auxiliary boiler (the fuel oil has a maximum fuel sulfur content limit of 0.5%, by weight).

## Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Jacksonville Electric Authority  
Southside Generating Station

DRAFT Permit No.: 0310046-001-AV

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

### E.U. ID

#### No.            Brief Description of Emissions Units and/or Activity

-008        Storage Tanks (tanks 1-4)

-xxx        Storage Tanks (tanks 5-6)

-008    Storage Tanks.

1. JEA Tank #1	No. 6 Fuel Oil Storage	2,940,000 gallons
2. JEA Tank #2	No. 6 Fuel Oil Storage	2,940,000 gallons
3. JEA Tank #3	No. 6 Fuel Oil Storage	3,234,000 gallons
4. JEA Tank #4	No. 6 Fuel Oil Storage	4,578,000 gallons

-xxx    Storage Tanks.

1. JEA Tank #5	No. 2 Fuel Oil Storage	2,000 gallons
2. JEA Tank #6	No. 6 Fuel Oil Calibration	42,000 gallons



Florida Department of  
**Environmental Protection**

**Memorandum**

TO: Mr. Walter P. Brussels, Managing Director, JEA  
Mr. Brian M. Wirz, Designated Representative, JEA  
Mr. Richard Robinson, AWQD  
Mr. Richard Breitmoser, P.E., JEA  
Mr. Bert Gianazza, Applicant Contact, JEA

THRU: Scott M. Sheplak, P.E., Title V Section

FROM: Bruce Mitchell

DATE: July 22, 1997

SUBJECT: Replacement Pages Regarding the DRAFT Title V Operation Permit  
Jacksonville Electric Authority - Southside Generating Station  
Title V Operation Permit No.: 0310046-001-TV

Based on a review of Table 1-1, a typo was found on the Auxiliary Boiler #1 for SO<sub>2</sub> emissions. The original table listed the equivalent lbs/hr as 97.4, and should have been 10.7, and the equivalent TPY as 340.6, and should have been 47.0. Please replace the enclosed page with the appropriate page in the DRAFT permit package that was mailed to you on the 10th.

If there are any questions, please give me a call @ (850)488-1344 or SC: 278-1344.

/bm

Enclosures

7/22 - Bruce Mitchell  
Reading File  
Scott Sheplak

**Table 1-1, Summary of Air Pollutant Standards and Terms**

Jacksonville Electric Authority  
Southside Generating Station

DRAFT Permit No.: 0310046-001-AV  
Facility ID No.: 0310046

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
-004	Boiler #4 (796 MMBtu/hr) (825 MMBtu/hr) <b>Acid Rain Phase II Unit</b>  (75.0 MW Turbine-generator)	VE	No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
			Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
		PM	No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	79.6	348.7	62-296.405(1)(b)	A.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	82.5	361.4	62-296.405(1)(b)	A.7.
		PM - SB **	No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	238.8	435.8	62-210.700(3)	A.8.
			Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	247.5	451.7	62-210.700(3)	A.8.
		SO <sub>2</sub>	No. 6 F.O.	8760	1.10 lb/MMBtu	N/A	N/A	875.6	3,835.1	62-296.405(1)(c)1.b.	A.9.
Natural Gas	8760		N/A	N/A	N/A	N/A	N/A	N/A	N/A		
% Sulfur	No. 6 F.O.	8760	max. sulfur content 1.0 %, by wt.			875.6	3,835.1	Applicant Request	A.10.		
-005	Boiler #5 (1500 MMBtu/hr) (1550 MMBtu/hr) <b>Acid Rain Phase II Unit</b>  (156.6 MW Turbine-generator)	VE	No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
			Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
		PM	No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	150.0	657.0	62-296.405(1)(b)	A.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	155.0	678.9	62-296.405(1)(b)	A.7.
		PM - SB **	No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	450.0	821.3	62-210.700(3)	A.8.
			Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	465.0	848.6	62-210.700(3)	A.8.
		SO <sub>2</sub>	No. 6 F.O.	8760	1.10 lb/MMBtu	N/A	N/A	1,650.0	7,227.0	62-296.405(1)(c)1.b.	A.9.
Natural Gas	8760		N/A	N/A	N/A	N/A	N/A	N/A	N/A		
% Sulfur	No. 6 F.O.	8760	max. sulfur content 1.0%, by wt.			1,650.0	7,227.0	Applicant Request	A.10.		
-010	Auxiliary Boiler #1 (21.0 MMBtu/hr)	VE	No. 2 F.O.	8760	15%; 40% - 1 two min. period/hr.			N/A	N/A	AC16-86190	B.5. & B.6.
			Natural Gas	8760	15%; 40% - 1 two min. period/hr.			N/A	N/A	AC16-86190	B.5. & B.6.
		% Sulfur	No. 2 F.O.	8760	max. sulfur content 0.5%, by wt.			10.7	47.0	AC16-86190	B.8.
		SO <sub>2</sub>	Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	N/A	

**Notes:**

\* The "Equivalent Emissions" listed are for informational purposes.

\*\* PM - SB refers to "soot blowing" and "load change".

[electronic file name: 03100461.xls]